

GOMOS Level 2 Daily Report

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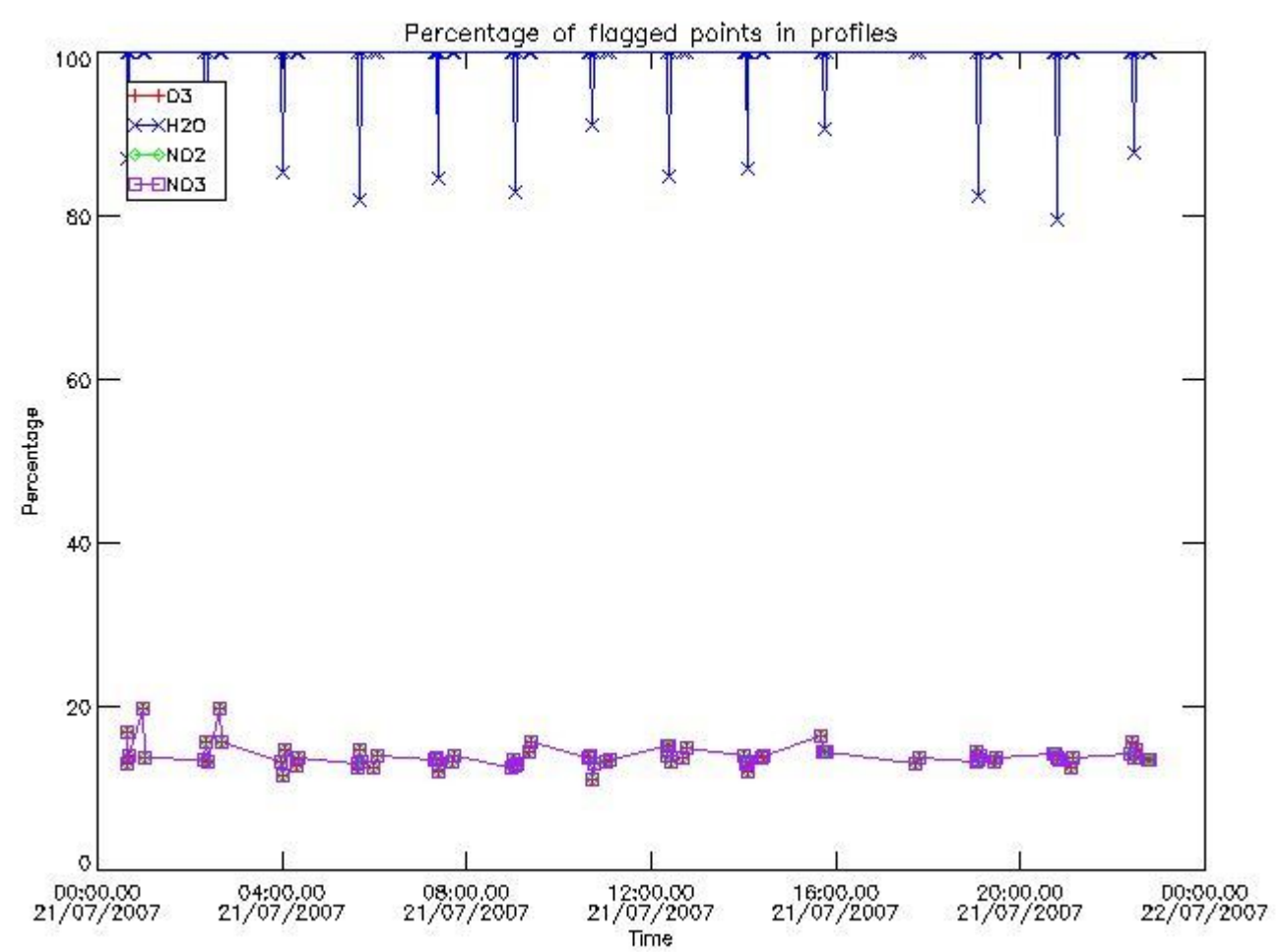
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220	GOM_NL__2PRFIN20070721_201855_000000372060_00071_28181_1275.N1	21-JUL-2007 20:18:55	Bright	37.000	49	1Alp UMi	1.9900	6300.0	74	28181	No
221	GOM_NL__2PRFIN20070721_203126_000000372060_00071_28181_1276.N1	21-JUL-2007 20:31:26	Bright	36.500	6	13Alp Aur	0.080000	3400.0	73	28181	No
222	GOM_NL__2PRFIN20070721_203519_000000372060_00071_28181_1277.N1	21-JUL-2007 20:35:19	Bright	37.000	114	3Iot Aur	2.6930	4600.0	74	28181	No
223	GOM_NL__2PRFIN20070721_204238_000000362060_00071_28181_1278.N1	21-JUL-2007 20:42:38	Dark	36.000	27	24Gam Ori	1.6360	26000.	72	28181	No
224	GOM_NL__2PRFIN20070721_204434_000000362060_00071_28181_1279.N1	21-JUL-2007 20:44:34	Dark	36.000	30	46Eps Ori	1.6940	30000.	72	28181	No
225	GOM_NL__2PRFIN20070721_204650_000000372060_00071_28181_1280.N1	21-JUL-2007 20:46:50	Dark	37.000	7	19Bet Ori	0.10000	14000.	74	28181	No
226	GOM_NL__2PRFIN20070721_204911_000000382060_00071_28181_1281.N1	21-JUL-2007 20:49:11	Dark	37.500	101	11Alp Lep	2.5820	7000.0	75	28181	No
227	GOM_NL__2PRFIN20070721_210515_000000412060_00072_28182_1276.N1	21-JUL-2007 21:05:15	Dark	40.500	143	Alp Hyi	2.8570	7200.0	81	28182	No
228	GOM_NL__2PRFIN20070721_210835_000000372060_00072_28182_1277.N1	21-JUL-2007 21:08:35	Dark	37.000	135	Bet Hyi	2.8200	5800.0	74	28182	No
229	GOM_NL__2PRFIN20070721_211255_000000432060_00072_28182_1278.N1	21-JUL-2007 21:12:55	Straylight	43.000	148	Alp Tuc	2.8780	4100.0	86	28182	No
230	GOM_NL__2PRFIN20070721_211634_000000462060_00072_28182_1279.N1	21-JUL-2007 21:16:34	Straylight	46.000	45	Alp Pav	1.9400	26000.	92	28182	No
231	GOM_NL__2PRFIN20070721_212425_000000392060_00072_28182_1280.N1	21-JUL-2007 21:24:25	Bright	38.500	38	20Eps Sgr	1.8360	11000.	77	28182	No
232	GOM_NL__2PRFIN20070721_212619_000000372060_00072_28182_1281.N1	21-JUL-2007 21:26:19	Bright	36.500	57	34Sig Sgr	2.0660	26000.	73	28182	No
233	GOM_NL__2PRFIN20070721_212740_000000382060_00072_28182_1282.N1	21-JUL-2007 21:27:40	Bright	38.000	155	41Pi Sgr	2.9000	6600.0	76	28182	No
234	GOM_NL__2PRFIN20070721_213537_000000372060_00072_28182_1283.N1	21-JUL-2007 21:35:37	Bright	36.500	126	60Bet Oph	2.7700	4250.0	73	28182	No
235	GOM_NL__2PRFIN20070721_213755_000000352060_00072_28182_1284.N1	21-JUL-2007 21:37:55	Bright	35.000	59	55Alp Oph	2.0800	8900.0	70	28182	No
236	GOM_NL__2PRFIN20070721_214459_000000352060_00072_28182_1285.N1	21-JUL-2007 21:44:59	Bright	35.000	5	3Alp Lyr	0.033000	11000.	70	28182	No
237	GOM_NL__2PRFIN20070721_214831_000000382060_00072_28182_1286.N1	21-JUL-2007 21:48:31	Bright	38.000	69	33Gam Dra	2.2310	3800.0	76	28182	No
238	GOM_NL__2PRFIN20070721_215201_000000362060_00072_28182_1287.N1	21-JUL-2007 21:52:01	Bright	36.000	119	14Eta Dra	2.7270	4700.0	72	28182	No
239	GOM_NL__2PRFIN20070721_215616_000000372060_00072_28182_1288.N1	21-JUL-2007 21:56:16	Bright	36.500	60	7Bet UMi	2.0810	3950.0	73	28182	No
240	GOM_NL__2PRFIN20070721_215931_000000362060_00072_28182_1289.N1	21-JUL-2007 21:59:31	Bright	35.500	49	1Alp UMi	1.9900	6300.0	71	28182	No
241	GOM_NL__2PRFIN20070721_221202_000000382060_00072_28182_1290.N1	21-JUL-2007 22:12:02	Bright	38.000	6	13Alp Aur	0.080000	3400.0	76	28182	No
242	GOM_NL__2PRFIN20070721_222315_000000362060_00072_28182_1291.N1	21-JUL-2007 22:23:15	Dark	36.000	27	24Gam Ori	1.6360	26000.	72	28182	No
243	GOM_NL__2PRFIN20070721_222511_000000362060_00072_28182_1292.N1	21-JUL-2007 22:25:11	Dark	36.000	30	46Eps Ori	1.6940	30000.	72	28182	No
244	GOM_NL__2PRFIN20070721_222726_000000372060_00072_28182_1293.N1	21-JUL-2007 22:27:26	Dark	37.000	7	19Bet Ori	0.10000	14000.	74	28182	No
245	GOM_NL__2PRFIN20070721_222948_000000382060_00072_28182_1294.N1	21-JUL-2007 22:29:48	Dark	38.000	101	11Alp Lep	2.5820	7000.0	76	28182	No
246	GOM_NL__2PRFIN20070721_224552_000000382060_00073_28183_1290.N1	21-JUL-2007 22:45:52	Dark	37.500	143	Alp Hyi	2.8570	7200.0	75	28183	No
247	GOM_NL__2PRFIN20070721_224911_000000382060_00073_28183_1291.N1	21-JUL-2007 22:49:11	Dark	37.500	135	Bet Hyi	2.8200	5800.0	75	28183	No
248	GOM_NL__2PRFIN20070721_225331_000000422060_00073_28183_1292.N1	21-JUL-2007 22:53:31	Straylight	42.000	148	Alp Tuc	2.8780	4100.0	84	28183	No
249	GOM_NL__2PRFIN20070721_225711_000000402060_00073_28183_1293.N1	21-JUL-2007 22:57:11	Straylight	39.500	45	Alp Pav	1.9400	26000.	79	28183	No
250	GOM_NL__2PRFIN20070721_230501_000000432060_00073_28183_1294.N1	21-JUL-2007 23:05:01	Bright	43.000	38	20Eps Sgr	1.8360	11000.	86	28183	No
251	GOM_NL__2PRFIN20070721_230655_000000382060_00073_28183_1295.N1	21-JUL-2007 23:06:55	Bright	38.000	57	34Sig Sgr	2.0660	26000.	76	28183	No
252	GOM_NL__2PRFIN20070721_230815_000000382060_00073_28183_1296.N1	21-JUL-2007 23:08:15	Bright	38.000	155	41Pi Sgr	2.9000	6600.0	76	28183	No
253	GOM_NL__2PRFIN20070721_231613_000000362060_00073_28183_1297.N1	21-JUL-2007 23:16:13	Bright	36.000	126	60Bet Oph	2.7700	4250.0	72	28183	No
254	GOM_NL__2PRFIN20070721_231831_000000372060_00073_28183_1298.N1	21-JUL-2007 23:18:31	Bright	37.000	59	55Alp Oph	2.0800	8900.0	74	28183	No
255	GOM_NL__2PRFIN20070721_232535_000000372060_00073_28183_1299.N1	21-JUL-2007 23:25:35	Bright	36.500	5	3Alp Lyr	0.033000	11000.	73	28183	No
256	GOM_NL__2PRFIN20070721_232907_000000362060_00073_28183_1300.N1	21-JUL-2007 23:29:07	Bright	35.500	69	33Gam Dra	2.2310	3800.0	71	28183	No
257	GOM_NL__2PRFIN20070721_233237_000000342060_00073_28183_1301.N1	21-JUL-2007 23:32:37	Bright	33.500	119	14Eta Dra	2.7270	4700.0	67	28183	No
258	GOM_NL__2PRFIN20070721_233652_000000372060_00073_28183_1302.N1	21-JUL-2007 23:36:52	Bright	37.000	60	7Bet UMi	2.0810	3950.0	74	28183	No
259	GOM_NL__2PRFIN20070721_234007_000000372060_00073_28183_1303.N1	21-JUL-2007 23:40:07	Bright	36.500	49	1Alp UMi	1.9900	6300.0	73	28183	No
260	GOM_NL__2PRFIN20070721_235238_000000372060_00073_28183_1304.N1	21-JUL-2007 23:52:38	Bright	36.500	6	13Alp Aur	0.080000	3400.0	73	28183	No

3. Quality information per product

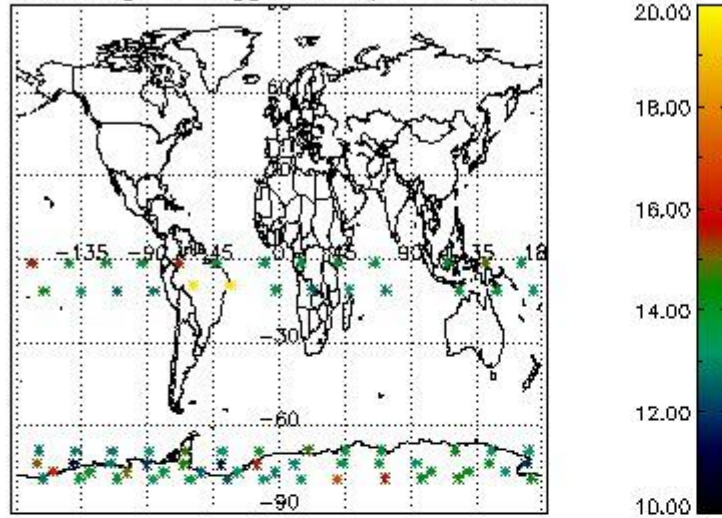
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

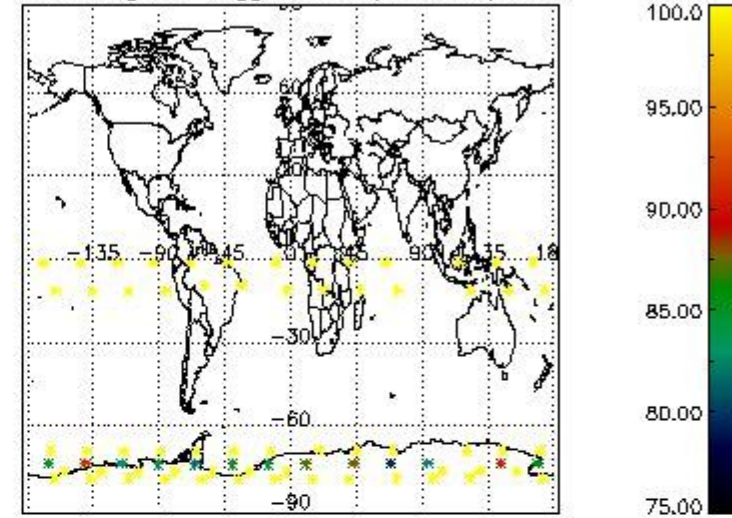


3.2 Plot quality information per product (world map)

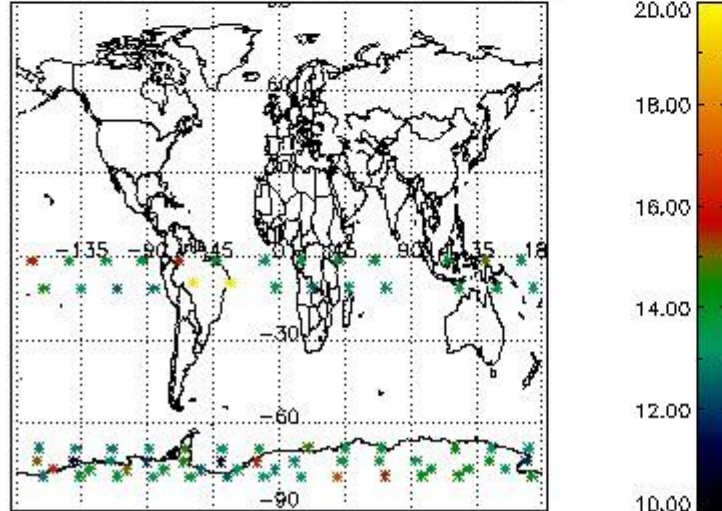
Percentage of flagged data per O3 profile



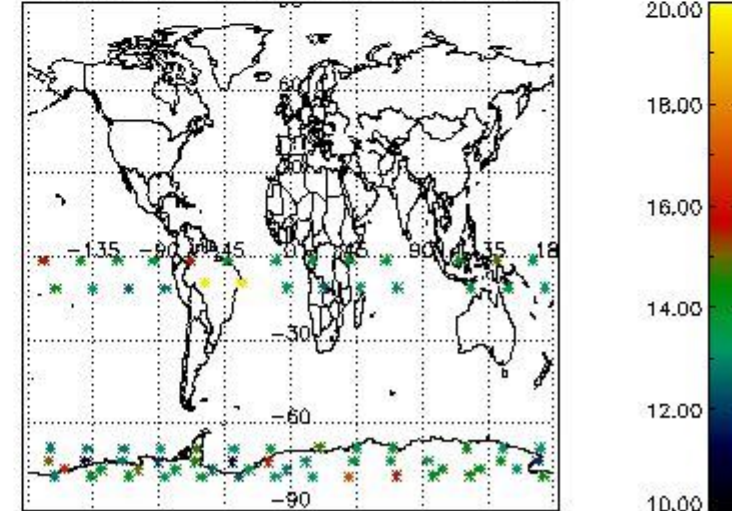
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

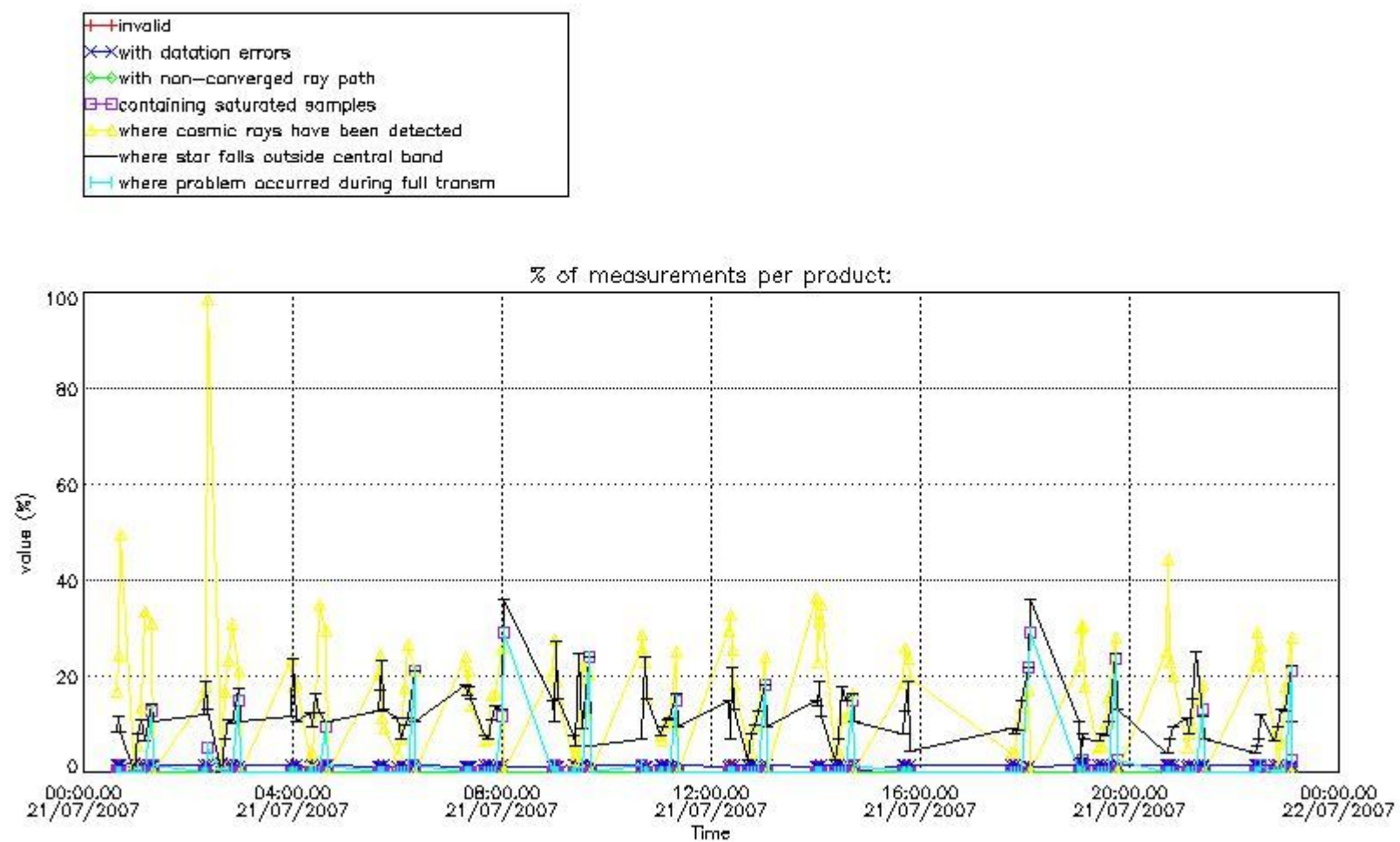


4. Level 1 quality information per product

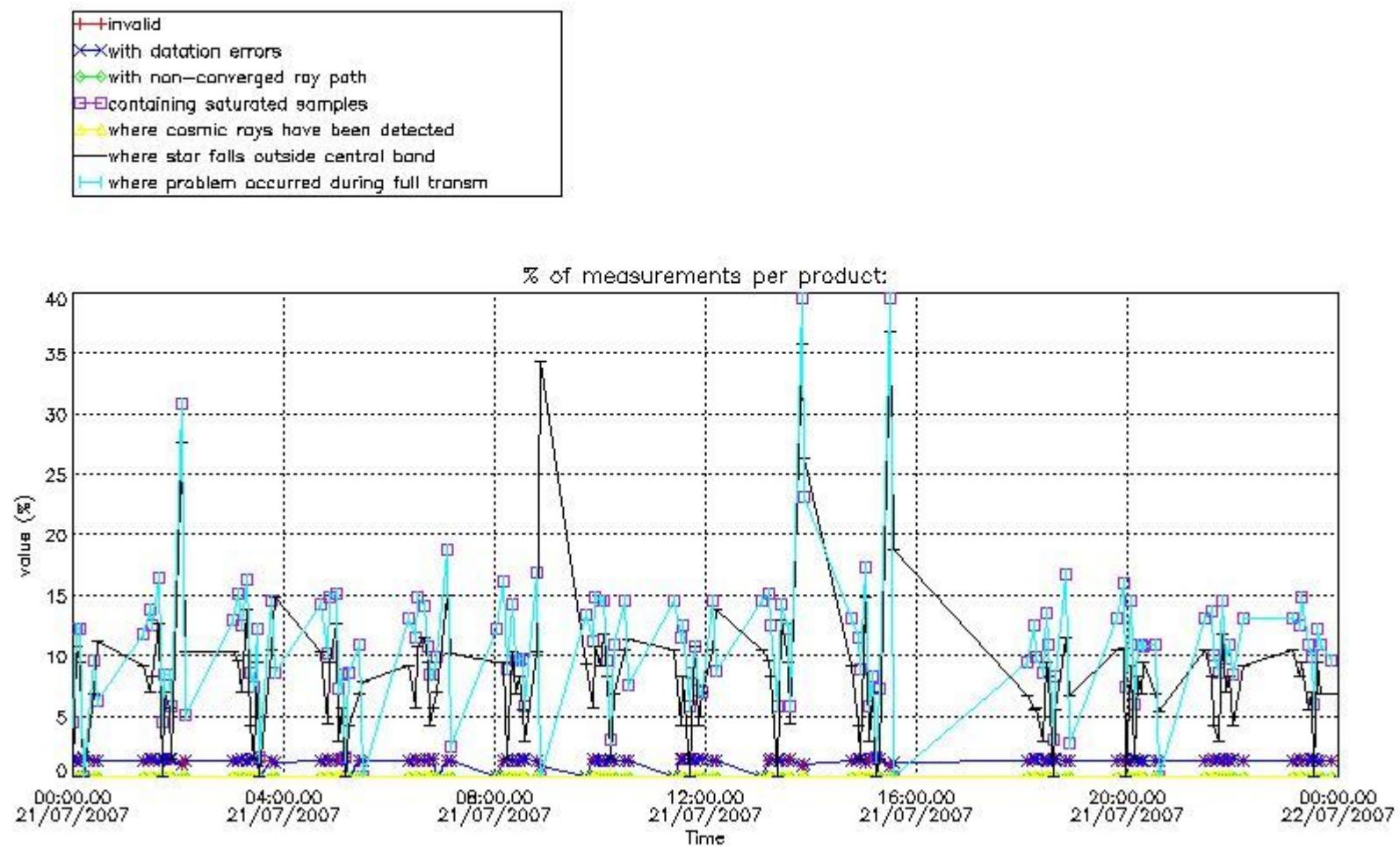
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

4.1 Plot quality information per product (time dependant) coming from level 1b processing

4.1.1 Plot level 1 quality information per product (time dependant): ENVISAT ASCENDING passes

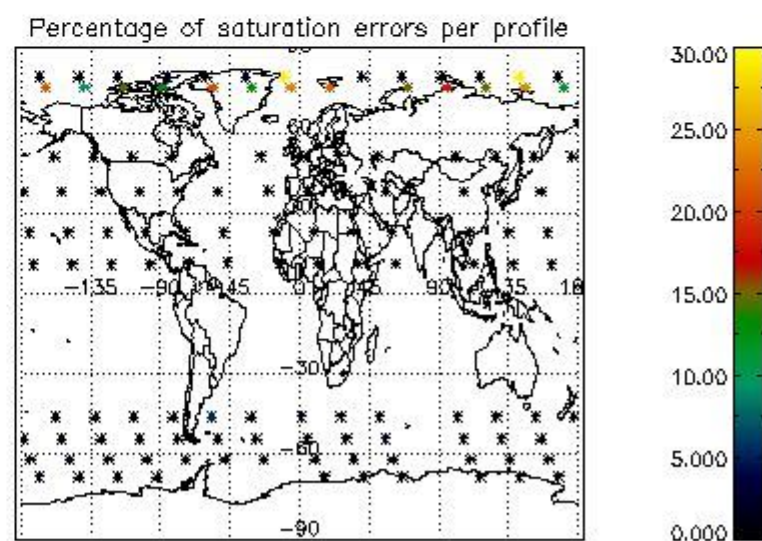
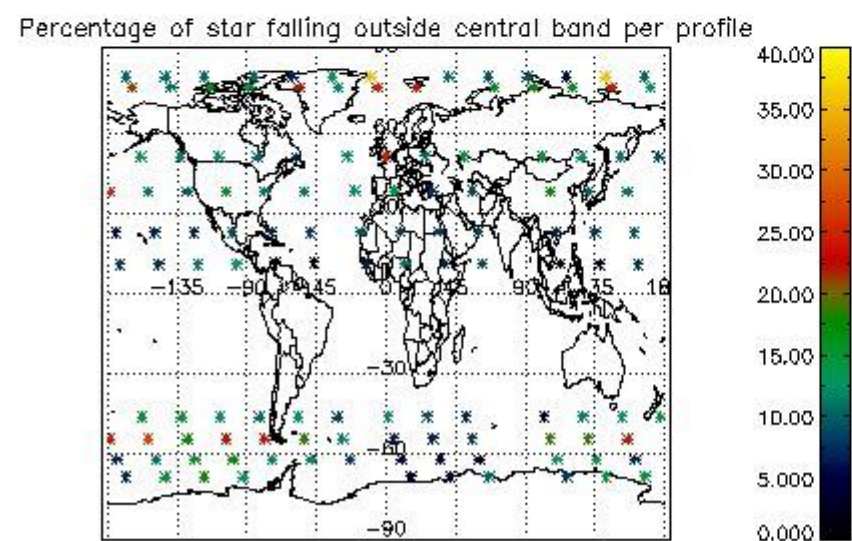
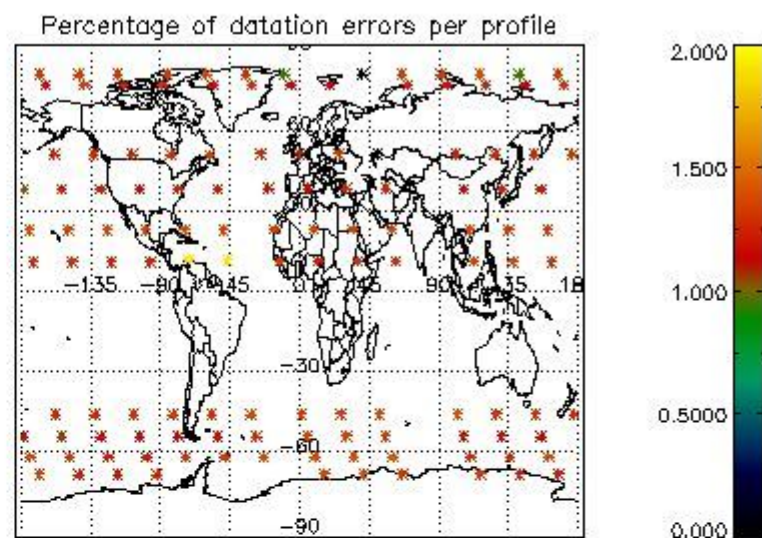
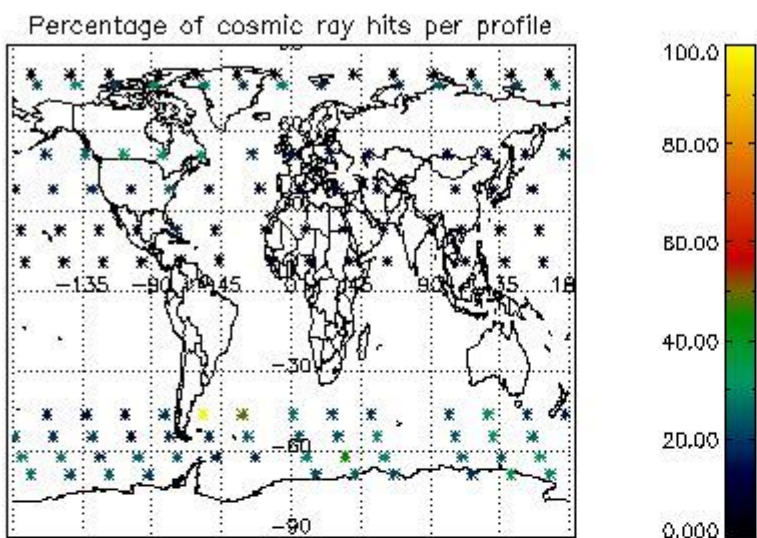


4.1.2 Plot level 1 quality information per product (time dependant): ENVISAT DESCENDING passes

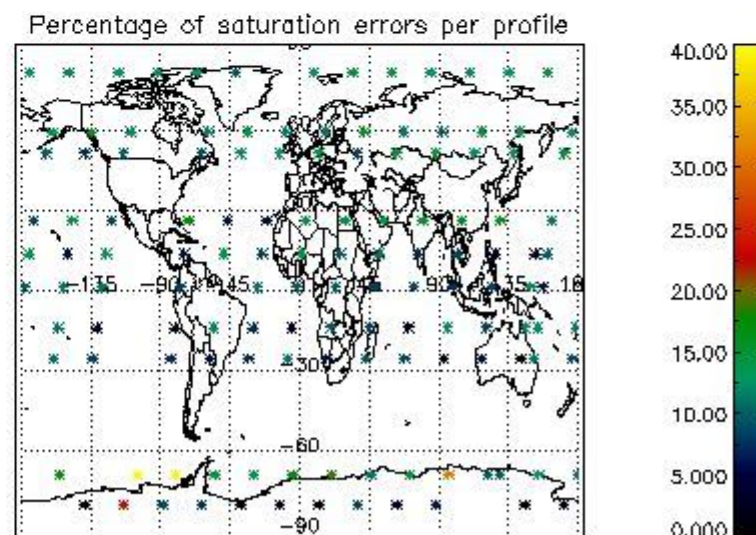
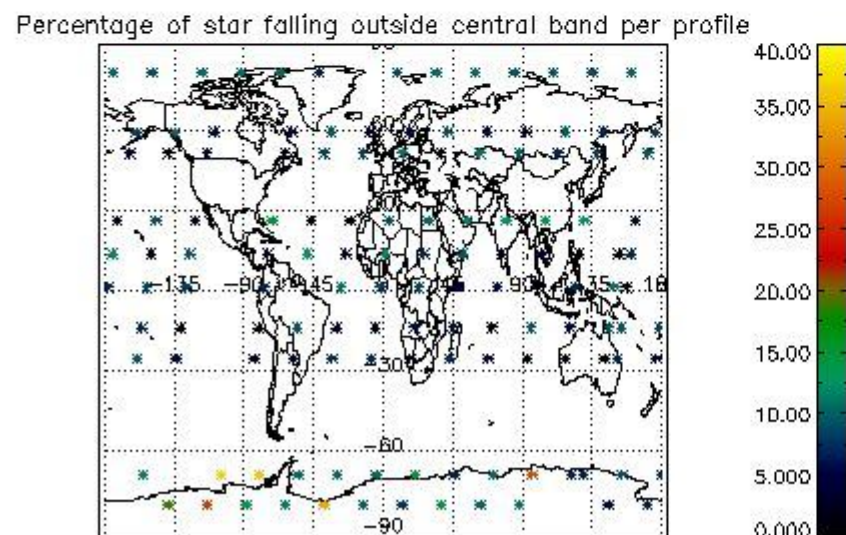
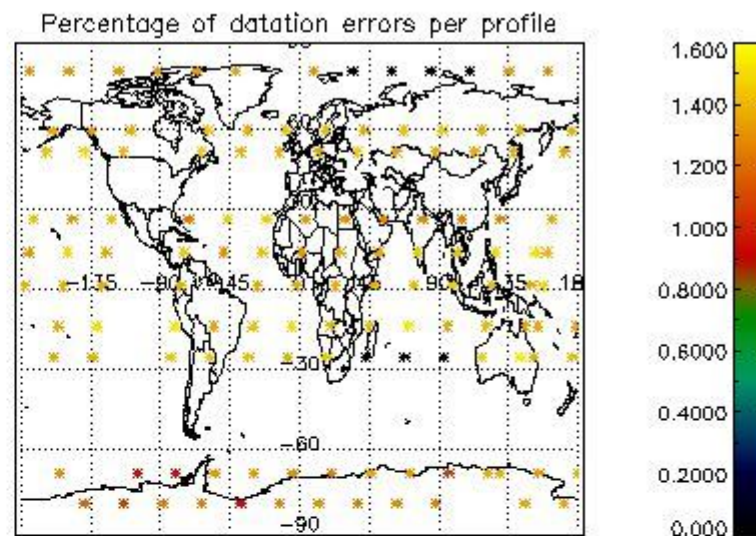
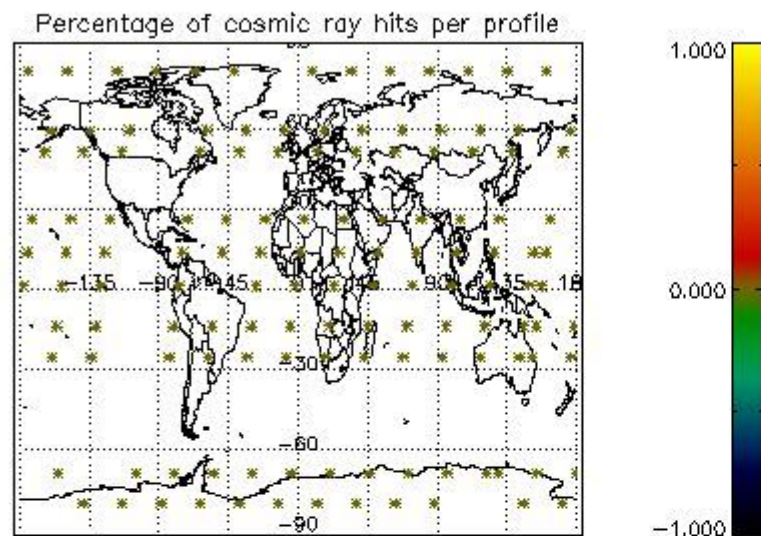


4.2 Plot quality information per product coming from level 1b processing (world map)

4.2.1 Plot level 1 quality information per product (world map): ENVISAT ASCENDING passes



4.2.2 Plot level 1 quality information per product (world map): ENVISAT DESCENDING passes



5. Trace gas profiles

5.1 Ozone statistics based on quality of products

The final quality of the products can be "measured" using the STD (Standard Deviation) attached to every point profile. This information is written to the parameter GOM_NL__2P/NL_LOCAL_SPECIES_DENSITY/o3_std of the level 2 products. The table below shows the statistics for given STD ranges.

The statistics are given with respect to the overall valid production:

- Products without fatal errors: GOM_NL__2P/MPH/PRODUCT_ERR=0
- Valid point profile: GOM_NL__2P/NL_LOCAL_SPECIES_DENSITY/pcd(0)=0

The 'Criteria' is applied to valid points of dark limb products:

- Products in dark limb illumination condition: GOM_NL__2P/NL_SUMMARY_QUALITY/obs_ill_cond=0
- Products without fatal errors: GOM_NL__2P/MPH/PRODUCT_ERR=0
- Valid point profile: GOM_NL__2P/NL_LOCAL_SPECIES_DENSITY/pcd(0)=0

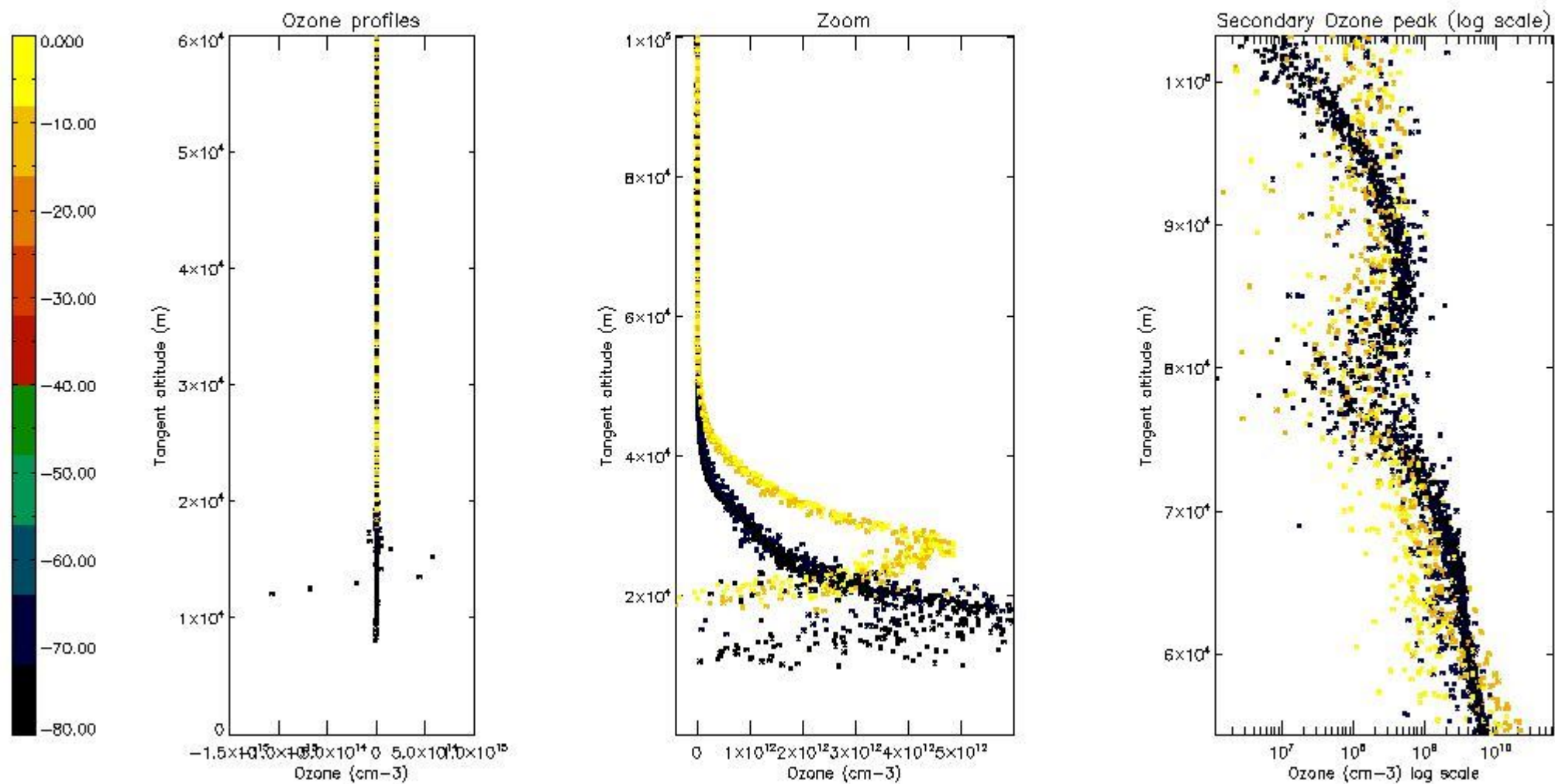
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	30
STD < 20	16

STD < 10	12
STD < 5	9

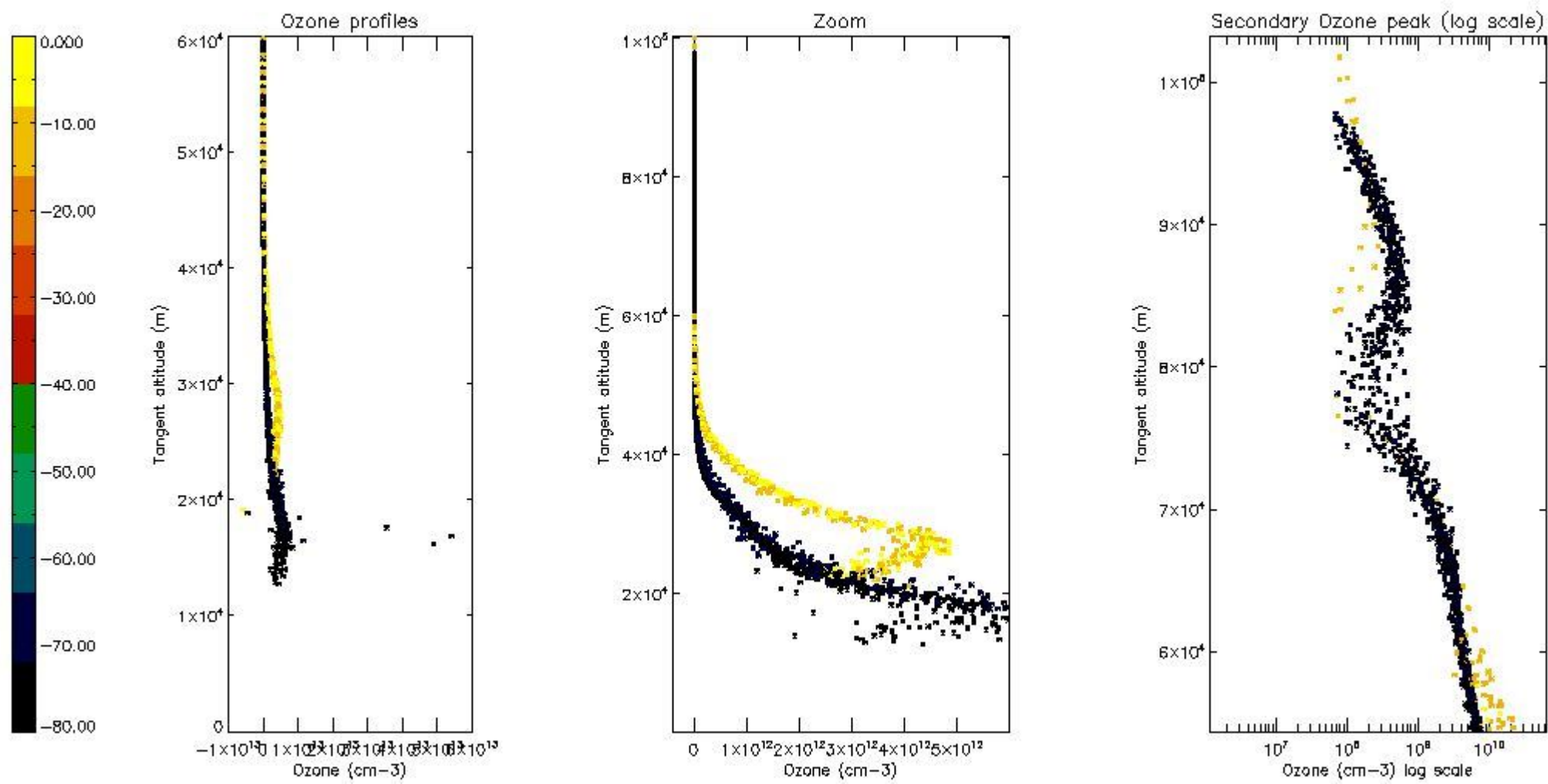
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



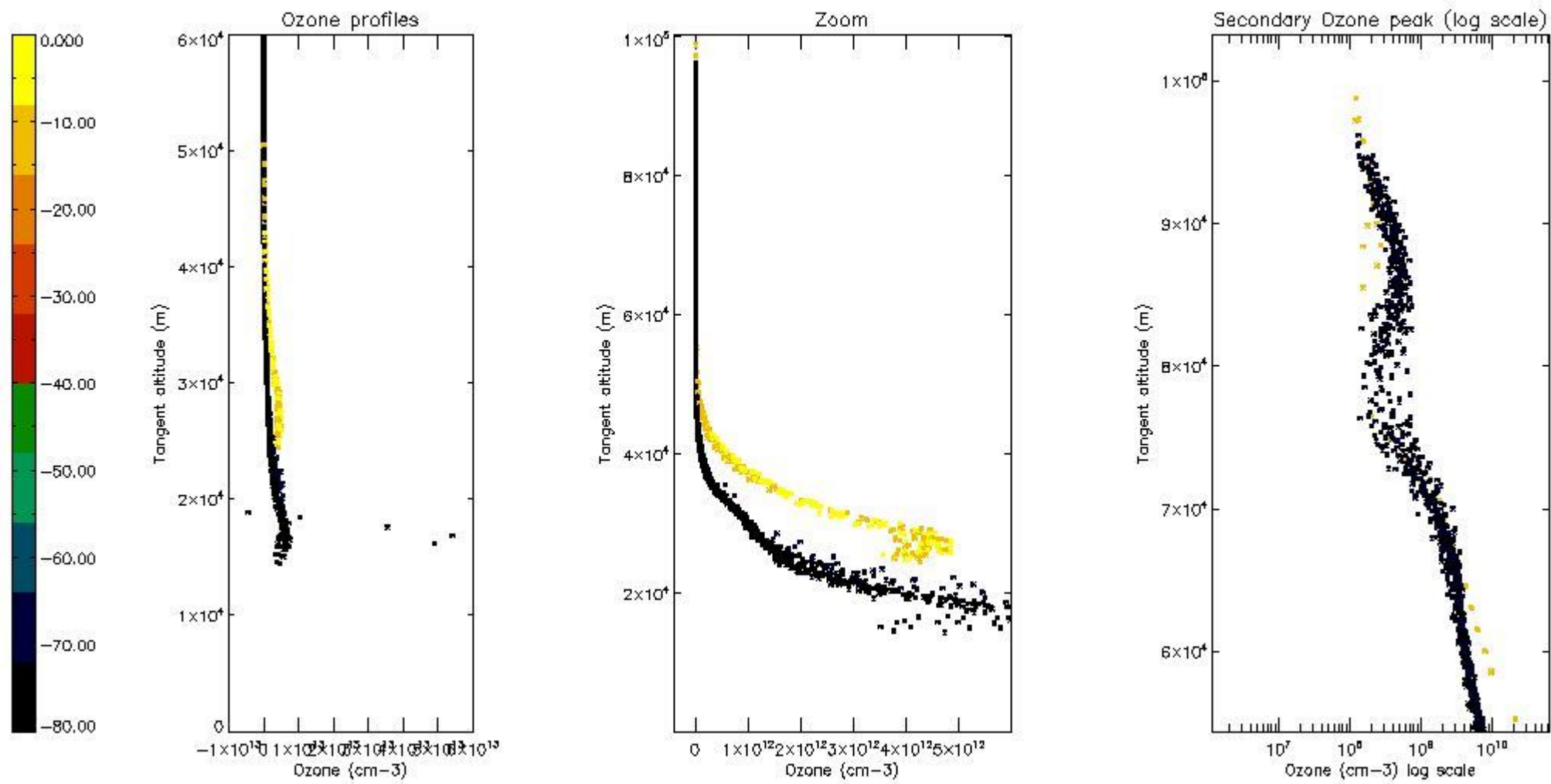
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



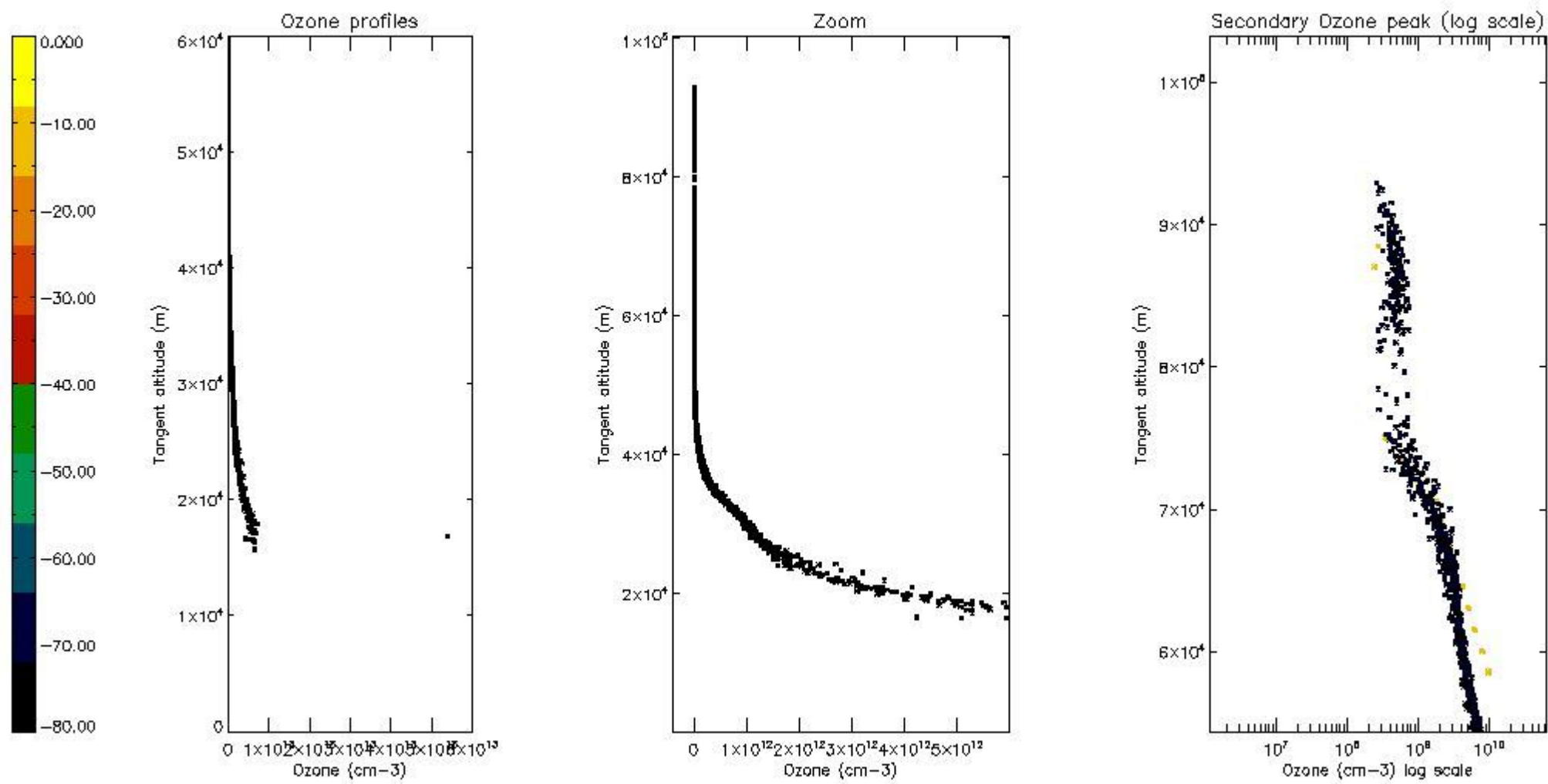
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



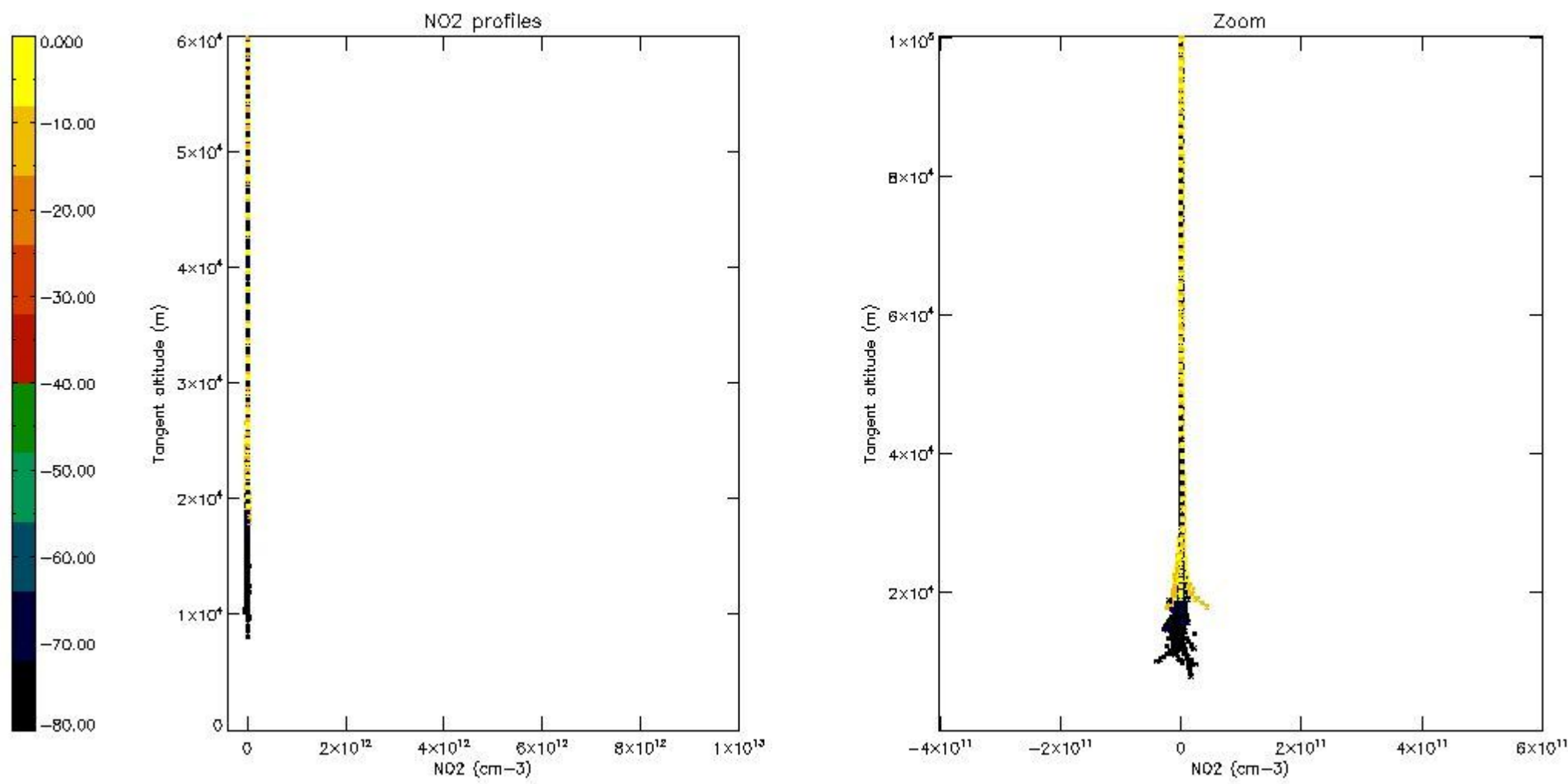
5.5 Plot ozone profiles where $STD < 5\%$ (dark without errors)

The colorbar represents the latitude.



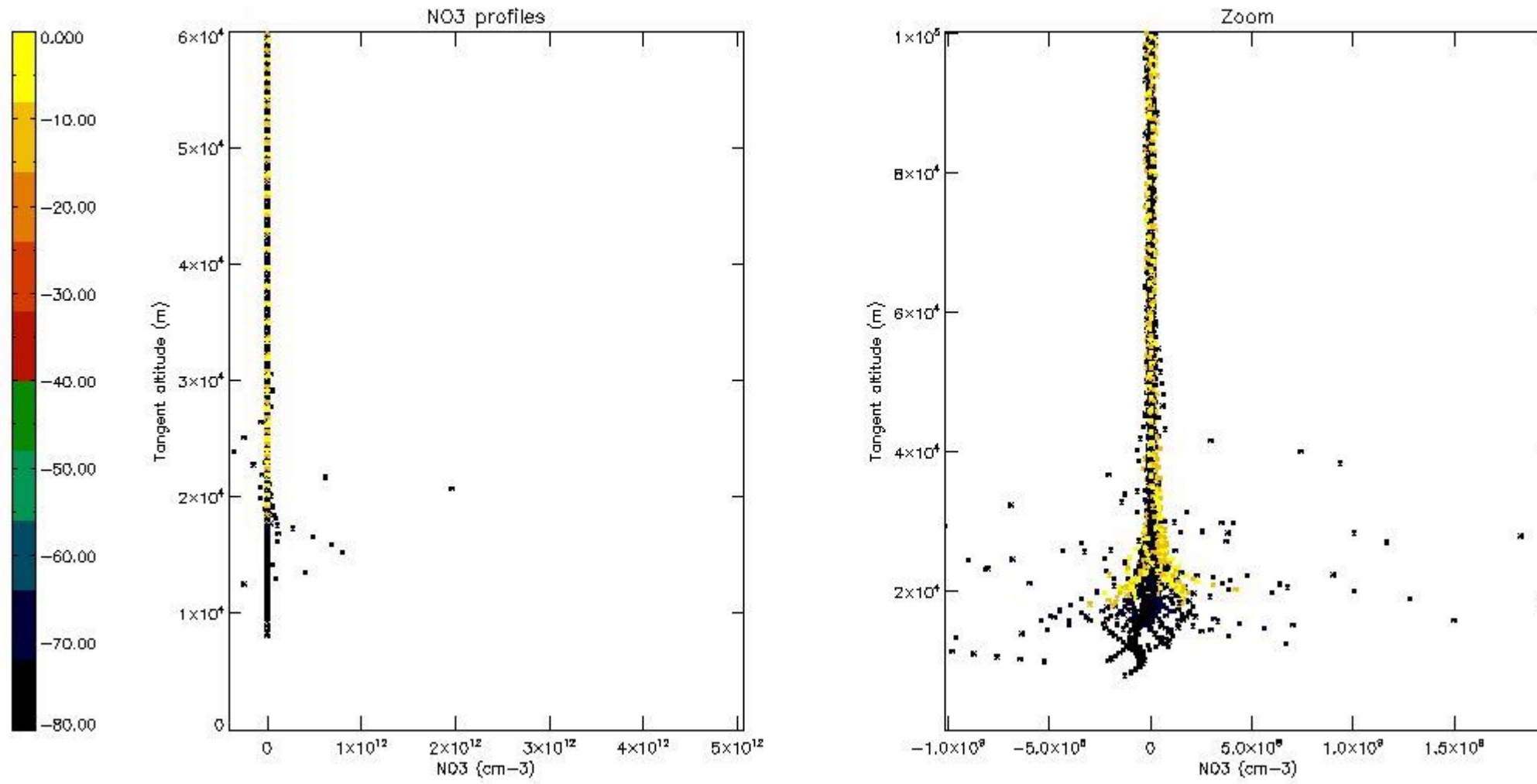
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



5.7 Plot NO3 profiles for all STD (dark without errors)

The colorbar represents the latitude.



6. Auxiliary Data Files used for the production reported in section 2

The number reported in the third column indicates since which file (see list in section 2) the corresponding auxiliary file has been used. The fourth column is the date of those product files.

Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	21-JUL-2007 00:00:43
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	21-JUL-2007 00:00:43
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	21-JUL-2007 00:00:43

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[3. Level 2 Quality information per product](#)

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[4. Level 1 Quality information per product \(stored on level 2 products\)](#)

[4.1 Plot of level 1 quality information per product \(time dependant\)](#)

[4.1.1 Plot of level 1 quality information per product \(time dependant\): ASCENDING](#)

[4.1.2 Plot of level 1 quality information per product \(time dependant\): DESCENDING](#)

[4.2 Plot of level 1 quality information per product \(world map\)](#)

[4.2.1 Plot of level 1 quality information per product \(world map\): ASCENDING](#)

[4.2.2 Plot of level 1 quality information per product \(world map\): DESCENDING](#)

[5. Ozone profiles based on quality statistics and other trace gas profiles](#)

[5.1 Ozone statistics based on quality of products](#)

[5.2 Plot ozone profiles for all STD \(dark without errors\)](#)

[5.3 Plot ozone profiles where STD < 20% \(dark without errors\)](#)

[5.4. Plot ozone profiles where STD < 10% \(dark without errors\)](#)

[5.5. Plot ozone profiles where STD < 5% \(dark without errors\)](#)

[5.6 Plot NO2 profiles for all STD \(dark without errors\)](#)

[5.7 Plot NO3 profiles for all STD \(dark without errors\)](#)

[5.8 Plot H2O profiles \(only for occultations of stars 1,2,3,4,13,14,16,26,63 dark without errors\) for all STD](#)

[6. Auxiliary Data Files used for the production reported in section 2](#)

This report presents the daily analysis on parameters extracted from GOMOS level 2 data (GOM_NL__2P). It is intended to monitor some important parameters that will impact the quality of these products. A list of level 2 products (and content) that have arrived during the reporting day to the PCF is also given.

Item	Value
Time of report generation	22APR2013 22:00:00
Data source version	GOMOS/6.01
Start time of products	21-07-2007 (21JUL2007 00:00:00)
Stop time of products	22-07-2007 (22JUL2007 00:00:00)
Store outputs in DB	Yes
Nb of level 2 prods	260
Nb of prods with errors	0

2. Summary of processed GOM_NL__2P products.

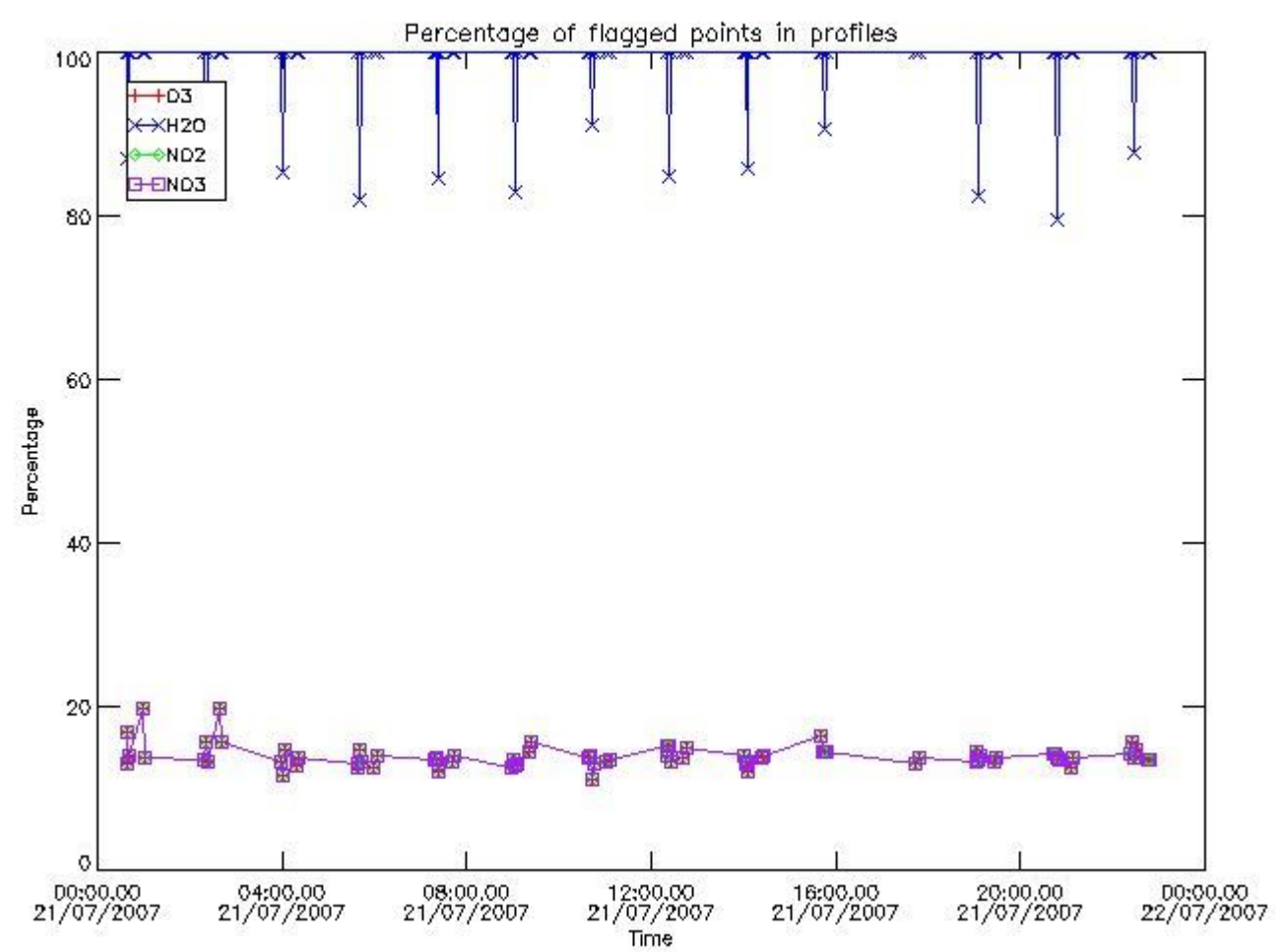
Nr	Filename	UTC Start time	Limb	Duration	Star Id	Star Name	Star Mag	Star Temp	Nb Meas	Orbit	Prod. error
1	GOM_NL__2PRFIN20070721_000043_000000332060_00059_28169_1060.N1	21-JUL-2007 00:00:43	Bright	33.000	69	33Gam Dra	2.2310	3800.0	66	28169	No
2	GOM_NL__2PRFIN20070721_000411_000000372060_00059_28169_1061.N1	21-JUL-2007 00:04:11	Bright	37.000	119	14Eta Dra	2.7270	4700.0	74	28169	No
3	GOM_NL__2PRFIN20070721_000826_000000372060_00059_28169_1062.N1	21-JUL-2007 00:08:26	Bright	37.000	60	7Bet UMi	2.0810	3950.0	74	28169	No
4	GOM_NL__2PRFIN20070721_001144_000000322060_00059_28169_1063.N1	21-JUL-2007 00:11:44	Bright	32.000	49	1Alp UMi	1.9900	6300.0	64	28169	No
5	GOM_NL__2PRFIN20070721_002414_000000372060_00059_28169_1064.N1	21-JUL-2007 00:24:14	Bright	36.500	6	13Alp Aur	0.080000	3400.0	73	28169	No
6	GOM_NL__2PRFIN20070721_002806_000000402060_00059_28169_1065.N1	21-JUL-2007 00:28:06	Bright	40.000	114	3lot Aur	2.6930	4600.0	80	28169	No
7	GOM_NL__2PRFIN20070721_003721_000000362060_00059_28169_1066.N1	21-JUL-2007 00:37:21	Dark	36.000	30	46Eps Ori	1.6940	30000.	72	28169	No
8	GOM_NL__2PRFIN20070721_003935_000000392060_00059_28169_1067.N1	21-JUL-2007 00:39:35	Dark	39.000	7	19Bet Ori	0.10000	14000.	78	28169	No
9	GOM_NL__2PRFIN20070721_004158_000000372060_00059_28169_1068.N1	21-JUL-2007 00:41:58	Dark	36.500	101	11Alp Lep	2.5820	7000.0	73	28169	No
10	GOM_NL__2PRFIN20070721_005814_000000262060_00060_28170_1061.N1	21-JUL-2007 00:58:14	Dark	26.000	9	Alp Eri	0.45300	24000.	52	28170	No
11	GOM_NL__2PRFIN20070721_010121_000000372060_00060_28170_1062.N1	21-JUL-2007 01:01:21	Dark	37.000	135	Bet Hyi	2.8200	5800.0	74	28170	No
12	GOM_NL__2PRFIN20070721_010538_000000412060_00060_28170_1063.N1	21-JUL-2007 01:05:38	Straylight	41.000	148	Alp Tuc	2.8780	4100.0	82	28170	No
13	GOM_NL__2PRFIN20070721_010919_000000382060_00060_28170_1064.N1	21-JUL-2007 01:09:19	Straylight	37.500	45	Alp Pav	1.9400	26000.	75	28170	No
14	GOM_NL__2PRFIN20070721_011711_000000392060_00060_28170_1065.N1	21-JUL-2007 01:17:11	Bright	39.000	38	20Eps Sgr	1.8360	11000.	78	28170	No
15	GOM_NL__2PRFIN20070721_011905_000000382060_00060_28170_1066.N1	21-JUL-2007 01:19:05	Bright	38.000	57	34Sig Sgr	2.0660	26000.	76	28170	No
16	GOM_NL__2PRFIN20070721_012026_000000382060_00060_28170_1067.N1	21-JUL-2007 01:20:26	Bright	38.000	155	41Pi Sgr	2.9000	6600.0	76	28170	No
17	GOM_NL__2PRFIN20070721_012823_000000362060_00060_28170_1068.N1	21-JUL-2007 01:28:23	Bright	36.000	126	60Bet Oph	2.7700	4250.0	72	28170	No
18	GOM_NL__2PRFIN20070721_013041_000000362060_00060_28170_1069.N1	21-JUL-2007 01:30:41	Bright	36.000	59	55Alp Oph	2.0800	8900.0	72	28170	No
19	GOM_NL__2PRFIN20070721_013749_000000402060_00060_28170_1070.N1	21-JUL-2007 01:37:49	Bright	39.500	5	3Alp Lyr	0.033000	11000.	79	28170	No
20	GOM_NL__2PRFIN20070721_014119_000000332060_00060_28170_1071.N1	21-JUL-2007 01:41:19	Bright	33.000	69	33Gam Dra	2.2310	3800.0	66	28170	No
21	GOM_NL__2PRFIN20070721_014447_000000362060_00060_28170_1072.N1	21-JUL-2007 01:44:47	Bright	35.500	119	14Eta Dra	2.7270	4700.0	71	28170	No
22	GOM_NL__2PRFIN20070721_014902_000000362060_00060_28170_1073.N1	21-JUL-2007 01:49:02	Bright	35.500	60	7Bet UMi	2.0810	3950.0	71	28170	No
23	GOM_NL__2PRFIN20070721_015220_000000342060_00060_28170_1074.N1	21-JUL-2007 01:52:20	Bright	34.000	49	1Alp UMi	1.9900	6300.0	68	28170	No
24	GOM_NL__2PRFIN20070721_020450_000000472060_00060_28170_1075.N1	21-JUL-2007 02:04:50	Bright	47.000	6	13Alp Aur	0.080000	3400.0	94	28170	No
25	GOM_NL__2PRFIN20070721_020842_000000392060_00060_28170_1076.N1	21-JUL-2007 02:08:42	Bright	39.000	114	3lot Aur	2.6930	4600.0	78	28170	No
26	GOM_NL__2PRFIN20070721_021757_000000382060_00060_28170_1077.N1	21-JUL-2007 02:17:57	Dark	38.000	30	46Eps Ori	1.6940	30000.	76	28170	No
27	GOM_NL__2PRFIN20070721_022012_000000432060_00060_28170_1078.N1	21-JUL-2007 02:20:12	Dark	42.500	7	19Bet Ori	0.10000	14000.	85	28170	No
28	GOM_NL__2PRFIN20070721_022234_000000392060_00060_28170_1079.N1	21-JUL-2007 02:22:34	Dark	38.500	101	11Alp Lep	2.5820	7000.0	77	28170	No
29	GOM_NL__2PRFIN20070721_023851_000000262060_00061_28171_1077.N1	21-JUL-2007 02:38:51	Dark	26.000	9	Alp Eri	0.45300	24000.	52	28171	No
30	GOM_NL__2PRFIN20070721_024157_000000362060_00061_28171_1078.N1	21-JUL-2007 02:41:57	Dark	36.000	135	Bet Hyi	2.8200	5800.0	72	28171	No
31	GOM_NL__2PRFIN20070721_024614_000000412060_00061_28171_1079.N1	21-JUL-2007 02:46:14	Straylight	41.000	148	Alp Tuc	2.8780	4100.0	82	28171	No
32	GOM_NL__2PRFIN20070721_024955_000000392060_00061_28171_1080.N1	21-JUL-2007 02:49:55	Straylight	39.000	45	Alp Pav	1.9400	26000.	78	28171	No
33	GOM_NL__2PRFIN20070721_025747_000000412060_00061_28171_1081.N1	21-JUL-2007 02:57:47	Bright	40.500	38	20Eps Sgr	1.8360	11000.	81	28171	No
34	GOM_NL__2PRFIN20070721_025941_000000382060_00061_28171_1082.N1	21-JUL-2007 02:59:41	Bright	37.500	57	34Sig Sgr	2.0660	26000.	75	28171	No
35	GOM_NL__2PRFIN20070721_030102_000000392060_00061_28171_1083.N1	21-JUL-2007 03:01:02	Bright	38.500	155	41Pi Sgr	2.9000	6600.0	77	28171	No
36	GOM_NL__2PRFIN20070721_030859_000000372060_00061_28171_1084.N1	21-JUL-2007 03:08:59	Bright	36.500	126	60Bet Oph	2.7700	4250.0	73	28171	No
37	GOM_NL__2PRFIN20070721_031117_000000362060_00061_28171_1085.N1	21-JUL-2007 03:11:17	Bright	36.000	59	55Alp Oph	2.0800	8900.0	72	28171	No
38	GOM_NL__2PRFIN20070721_031825_000000402060_00061_28171_1086.N1	21-JUL-2007 03:18:25	Bright	40.000	5	3Alp Lyr	0.033000	11000.	80	28171	No
39	GOM_NL__2PRFIN20070721_032155_000000352060_00061_28171_1087.N1	21-JUL-2007 03:21:55	Bright	35.000	69	33Gam Dra	2.2310	3800.0	70	28171	No
40	GOM_NL__2PRFIN20070721_032523_000000342060_00061_28171_1088.N1	21-JUL-2007 03:25:23	Bright	34.000	119	14Eta Dra	2.7270	4700.0	68	28171	No
41	GOM_NL__2PRFIN20070721_032938_000000372060_00061_28171_1089.N1	21-JUL-2007 03:29:38	Bright	37.000	60	7Bet UMi	2.0810	3950.0	74	28171	No
42	GOM_NL__2PRFIN20070721_033256_000000322060_00061_28171_1090.N1	21-JUL-2007 03:32:56	Bright	32.000	49	1Alp UMi	1.9900	6300.0	64	28171	No

220	GOM_NL__2PRFIN20070721_201855_000000372060_00071_28181_1275.N1	21-JUL-2007 20:18:55	Bright	37.000	49	1Alp UMi	1.9900	6300.0	74	28181	No
221	GOM_NL__2PRFIN20070721_203126_000000372060_00071_28181_1276.N1	21-JUL-2007 20:31:26	Bright	36.500	6	13Alp Aur	0.080000	3400.0	73	28181	No
222	GOM_NL__2PRFIN20070721_203519_000000372060_00071_28181_1277.N1	21-JUL-2007 20:35:19	Bright	37.000	114	3lot Aur	2.6930	4600.0	74	28181	No
223	GOM_NL__2PRFIN20070721_204238_000000362060_00071_28181_1278.N1	21-JUL-2007 20:42:38	Dark	36.000	27	24Gam Ori	1.6360	26000.	72	28181	No
224	GOM_NL__2PRFIN20070721_204434_000000362060_00071_28181_1279.N1	21-JUL-2007 20:44:34	Dark	36.000	30	46Eps Ori	1.6940	30000.	72	28181	No
225	GOM_NL__2PRFIN20070721_204650_000000372060_00071_28181_1280.N1	21-JUL-2007 20:46:50	Dark	37.000	7	19Bet Ori	0.10000	14000.	74	28181	No
226	GOM_NL__2PRFIN20070721_204911_000000382060_00071_28181_1281.N1	21-JUL-2007 20:49:11	Dark	37.500	101	11Alp Lep	2.5820	7000.0	75	28181	No
227	GOM_NL__2PRFIN20070721_210515_000000412060_00072_28182_1276.N1	21-JUL-2007 21:05:15	Dark	40.500	143	Alp Hyi	2.8570	7200.0	81	28182	No
228	GOM_NL__2PRFIN20070721_210835_000000372060_00072_28182_1277.N1	21-JUL-2007 21:08:35	Dark	37.000	135	Bet Hyi	2.8200	5800.0	74	28182	No
229	GOM_NL__2PRFIN20070721_211255_000000432060_00072_28182_1278.N1	21-JUL-2007 21:12:55	Straylight	43.000	148	Alp Tuc	2.8780	4100.0	86	28182	No
230	GOM_NL__2PRFIN20070721_211634_000000462060_00072_28182_1279.N1	21-JUL-2007 21:16:34	Straylight	46.000	45	Alp Pav	1.9400	26000.	92	28182	No
231	GOM_NL__2PRFIN20070721_212425_000000392060_00072_28182_1280.N1	21-JUL-2007 21:24:25	Bright	38.500	38	20Eps Sgr	1.8360	11000.	77	28182	No
232	GOM_NL__2PRFIN20070721_212619_000000372060_00072_28182_1281.N1	21-JUL-2007 21:26:19	Bright	36.500	57	34Sig Sgr	2.0660	26000.	73	28182	No
233	GOM_NL__2PRFIN20070721_212740_000000382060_00072_28182_1282.N1	21-JUL-2007 21:27:40	Bright	38.000	155	41Pi Sgr	2.9000	6600.0	76	28182	No
234	GOM_NL__2PRFIN20070721_213537_000000372060_00072_28182_1283.N1	21-JUL-2007 21:35:37	Bright	36.500	126	60Bet Oph	2.7700	4250.0	73	28182	No
235	GOM_NL__2PRFIN20070721_213755_000000352060_00072_28182_1284.N1	21-JUL-2007 21:37:55	Bright	35.000	59	55Alp Oph	2.0800	8900.0	70	28182	No
236	GOM_NL__2PRFIN20070721_214459_000000352060_00072_28182_1285.N1	21-JUL-2007 21:44:59	Bright	35.000	5	3Alp Lyr	0.033000	11000.	70	28182	No
237	GOM_NL__2PRFIN20070721_214831_000000382060_00072_28182_1286.N1	21-JUL-2007 21:48:31	Bright	38.000	69	33Gam Dra	2.2310	3800.0	76	28182	No
238	GOM_NL__2PRFIN20070721_215201_000000362060_00072_28182_1287.N1	21-JUL-2007 21:52:01	Bright	36.000	119	14Eta Dra	2.7270	4700.0	72	28182	No
239	GOM_NL__2PRFIN20070721_215616_000000372060_00072_28182_1288.N1	21-JUL-2007 21:56:16	Bright	36.500	60	7Bet UMi	2.0810	3950.0	73	28182	No
240	GOM_NL__2PRFIN20070721_215931_000000362060_00072_28182_1289.N1	21-JUL-2007 21:59:31	Bright	35.500	49	1Alp UMi	1.9900	6300.0	71	28182	No
241	GOM_NL__2PRFIN20070721_221202_000000382060_00072_28182_1290.N1	21-JUL-2007 22:12:02	Bright	38.000	6	13Alp Aur	0.080000	3400.0	76	28182	No
242	GOM_NL__2PRFIN20070721_222315_000000362060_00072_28182_1291.N1	21-JUL-2007 22:23:15	Dark	36.000	27	24Gam Ori	1.6360	26000.	72	28182	No
243	GOM_NL__2PRFIN20070721_222511_000000362060_00072_28182_1292.N1	21-JUL-2007 22:25:11	Dark	36.000	30	46Eps Ori	1.6940	30000.	72	28182	No
244	GOM_NL__2PRFIN20070721_222726_000000372060_00072_28182_1293.N1	21-JUL-2007 22:27:26	Dark	37.000	7	19Bet Ori	0.10000	14000.	74	28182	No
245	GOM_NL__2PRFIN20070721_222948_000000382060_00072_28182_1294.N1	21-JUL-2007 22:29:48	Dark	38.000	101	11Alp Lep	2.5820	7000.0	76	28182	No
246	GOM_NL__2PRFIN20070721_224552_000000382060_00073_28183_1290.N1	21-JUL-2007 22:45:52	Dark	37.500	143	Alp Hyi	2.8570	7200.0	75	28183	No
247	GOM_NL__2PRFIN20070721_224911_000000382060_00073_28183_1291.N1	21-JUL-2007 22:49:11	Dark	37.500	135	Bet Hyi	2.8200	5800.0	75	28183	No
248	GOM_NL__2PRFIN20070721_225331_000000422060_00073_28183_1292.N1	21-JUL-2007 22:53:31	Straylight	42.000	148	Alp Tuc	2.8780	4100.0	84	28183	No
249	GOM_NL__2PRFIN20070721_225711_000000402060_00073_28183_1293.N1	21-JUL-2007 22:57:11	Straylight	39.500	45	Alp Pav	1.9400	26000.	79	28183	No
250	GOM_NL__2PRFIN20070721_230501_000000432060_00073_28183_1294.N1	21-JUL-2007 23:05:01	Bright	43.000	38	20Eps Sgr	1.8360	11000.	86	28183	No
251	GOM_NL__2PRFIN20070721_230655_000000382060_00073_28183_1295.N1	21-JUL-2007 23:06:55	Bright	38.000	57	34Sig Sgr	2.0660	26000.	76	28183	No
252	GOM_NL__2PRFIN20070721_230815_000000382060_00073_28183_1296.N1	21-JUL-2007 23:08:15	Bright	38.000	155	41Pi Sgr	2.9000	6600.0	76	28183	No
253	GOM_NL__2PRFIN20070721_231613_000000362060_00073_28183_1297.N1	21-JUL-2007 23:16:13	Bright	36.000	126	60Bet Oph	2.7700	4250.0	72	28183	No
254	GOM_NL__2PRFIN20070721_231831_000000372060_00073_28183_1298.N1	21-JUL-2007 23:18:31	Bright	37.000	59	55Alp Oph	2.0800	8900.0	74	28183	No
255	GOM_NL__2PRFIN20070721_232535_000000372060_00073_28183_1299.N1	21-JUL-2007 23:25:35	Bright	36.500	5	3Alp Lyr	0.033000	11000.	73	28183	No
256	GOM_NL__2PRFIN20070721_232907_000000362060_00073_28183_1300.N1	21-JUL-2007 23:29:07	Bright	35.500	69	33Gam Dra	2.2310	3800.0	71	28183	No
257	GOM_NL__2PRFIN20070721_233237_000000342060_00073_28183_1301.N1	21-JUL-2007 23:32:37	Bright	33.500	119	14Eta Dra	2.7270	4700.0	67	28183	No
258	GOM_NL__2PRFIN20070721_233652_000000372060_00073_28183_1302.N1	21-JUL-2007 23:36:52	Bright	37.000	60	7Bet UMi	2.0810	3950.0	74	28183	No
259	GOM_NL__2PRFIN20070721_234007_000000372060_00073_28183_1303.N1	21-JUL-2007 23:40:07	Bright	36.500	49	1Alp UMi	1.9900	6300.0	73	28183	No
260	GOM_NL__2PRFIN20070721_235238_000000372060_00073_28183_1304.N1	21-JUL-2007 23:52:38	Bright	36.500	6	13Alp Aur	0.080000	3400.0	73	28183	No

3. Quality information per product

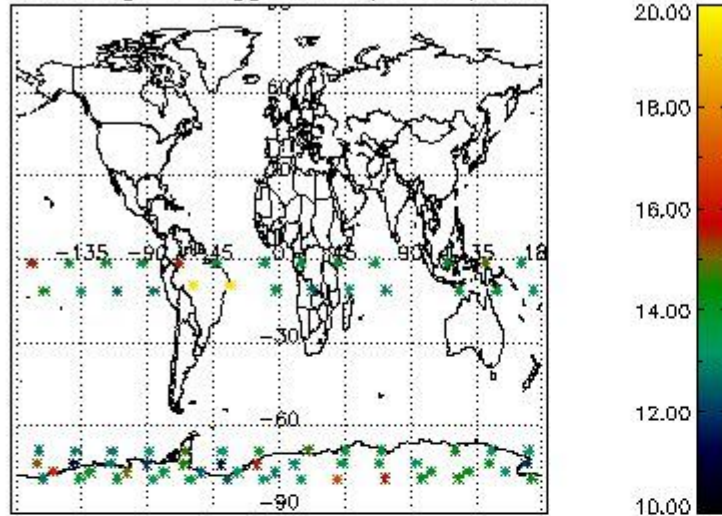
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products. Only products in dark limb conditions and without errors (error flag in the MPH set to "0") are used.

3.1 Plot quality information per product (time dependant)

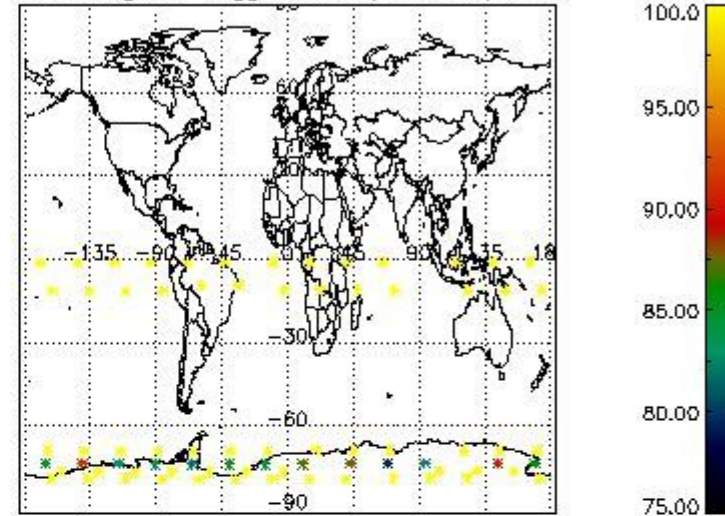


3.2 Plot quality information per product (world map)

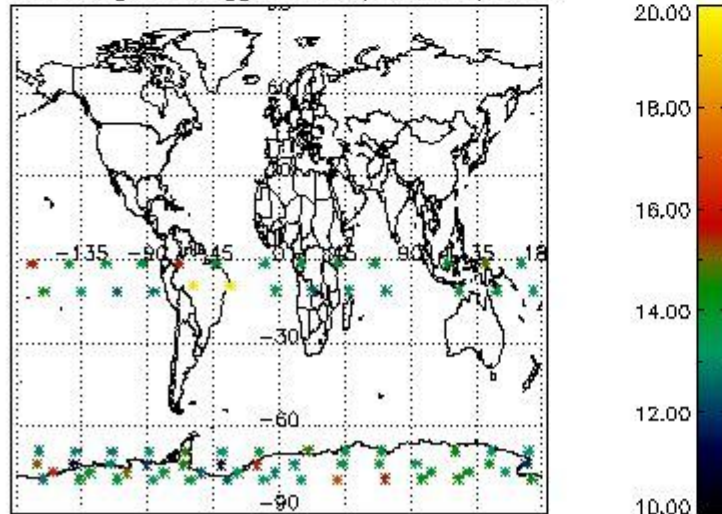
Percentage of flagged data per O3 profile



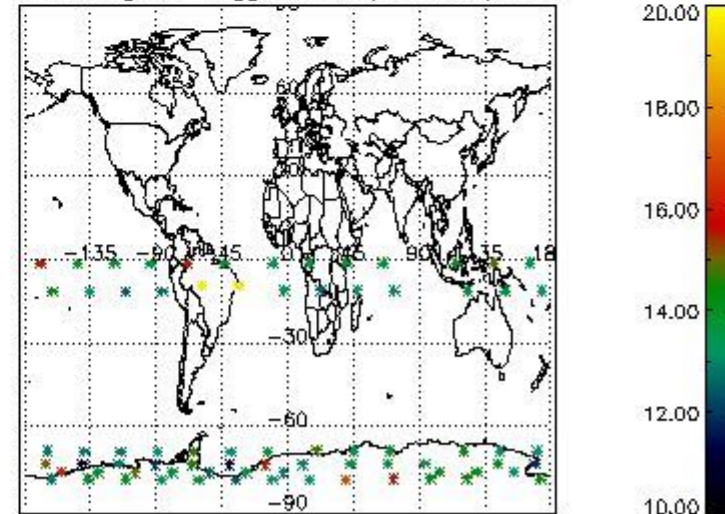
Percentage of flagged data per H2O profile



Percentage of flagged data per NO2 profile



Percentage of flagged data per NO3 profile

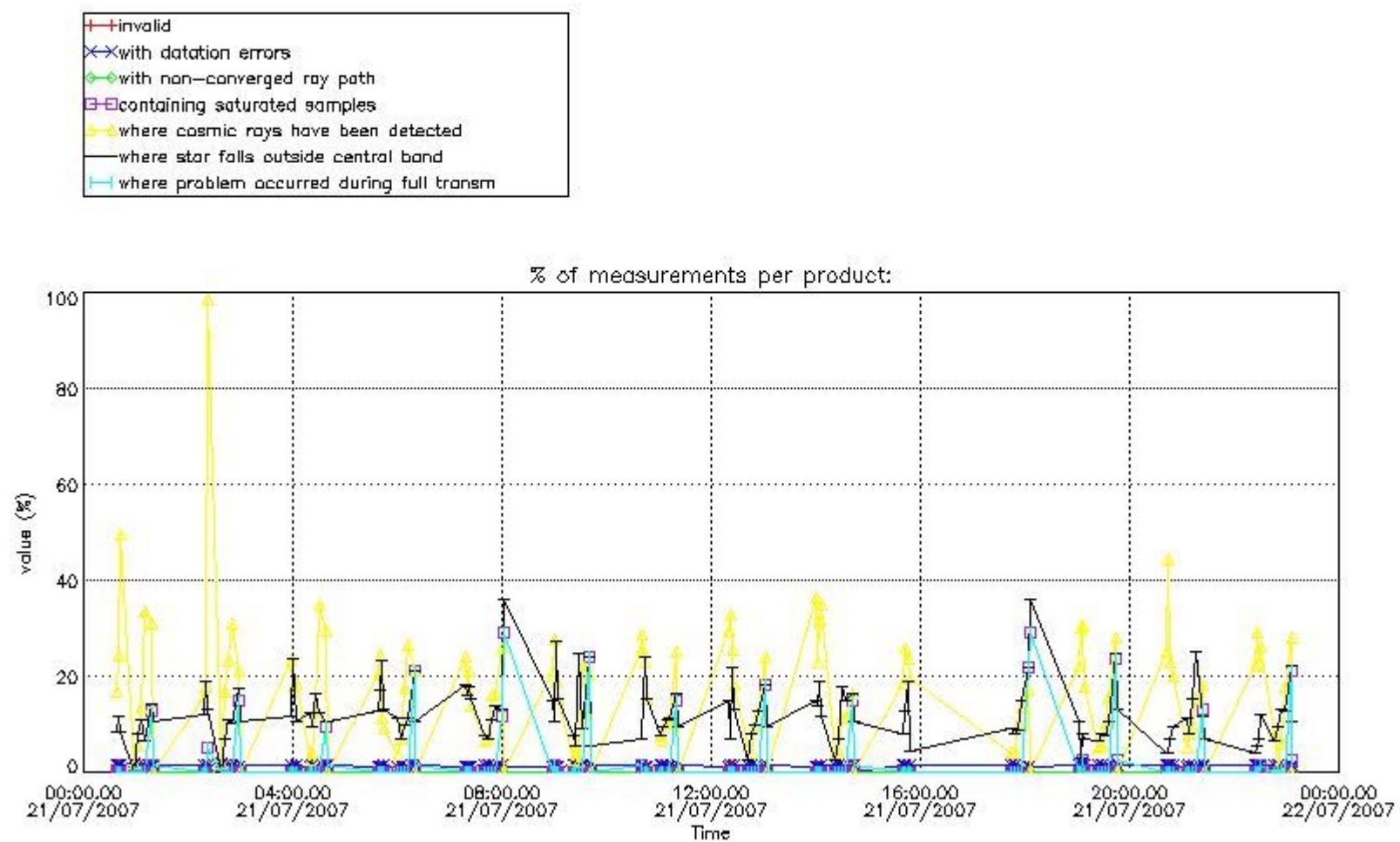


4. Level 1 quality information per product

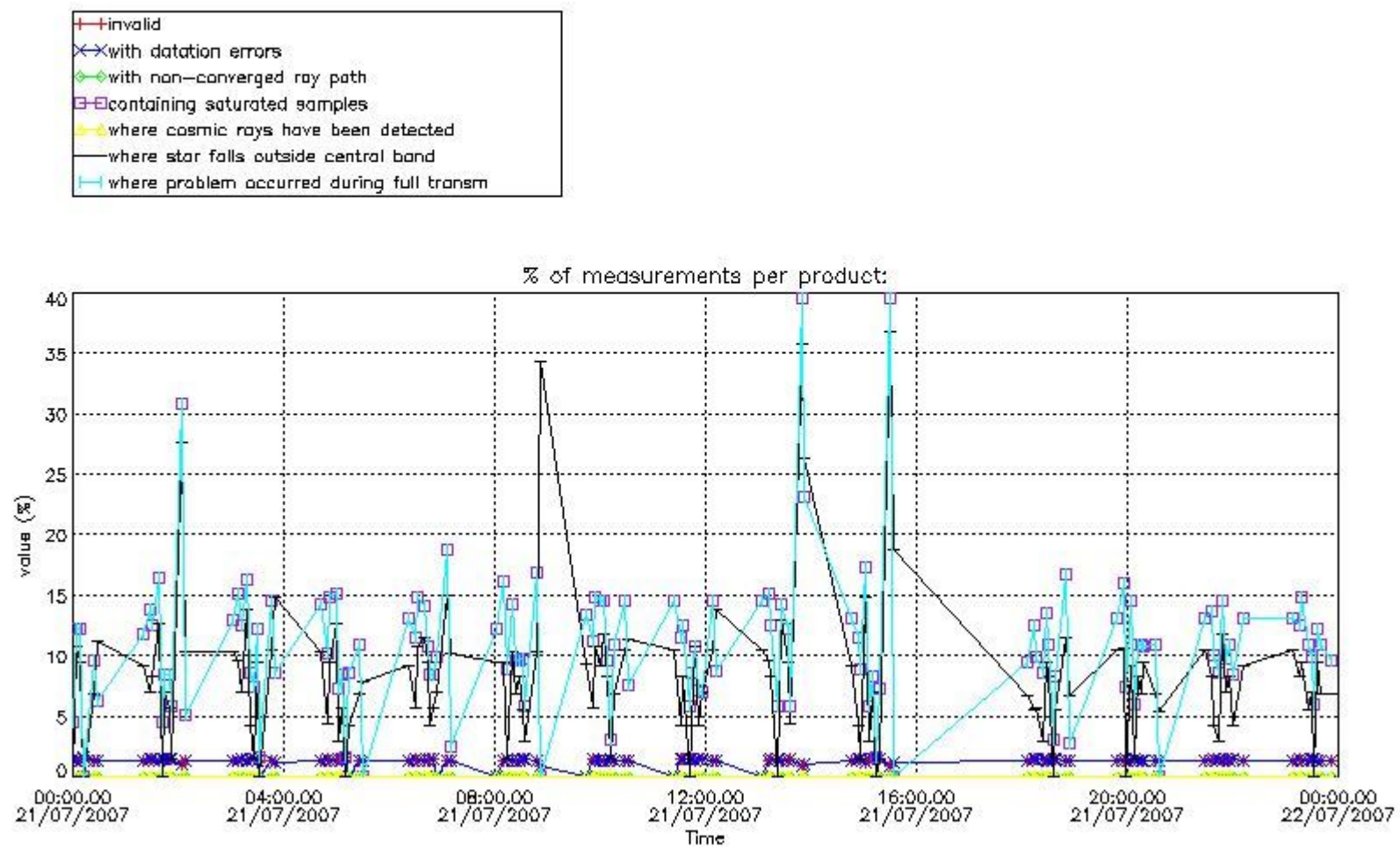
In this section it is plotted some information contained in the Quality Summary data set of the level 2 products that comes from the level 1b processing. Products without errors (error flag in the MPH set to "0") are used.

4.1 Plot quality information per product (time dependant) coming from level 1b processing

4.1.1 Plot level 1 quality information per product (time dependant): ENVISAT ASCENDING passes

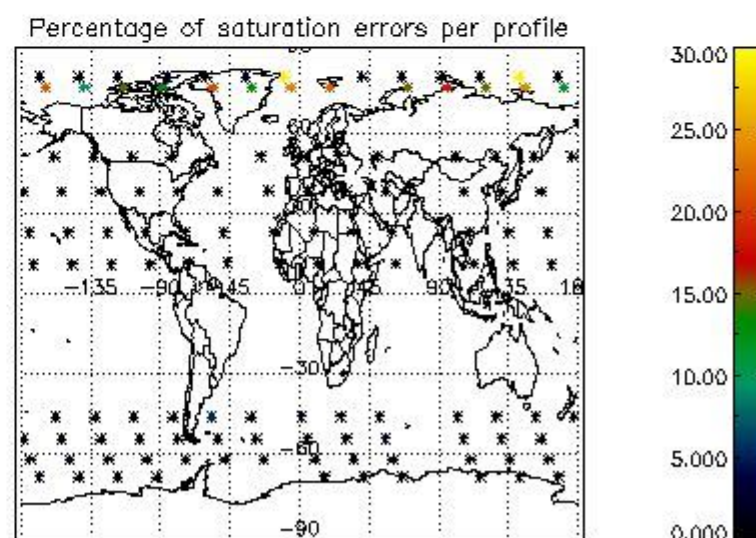
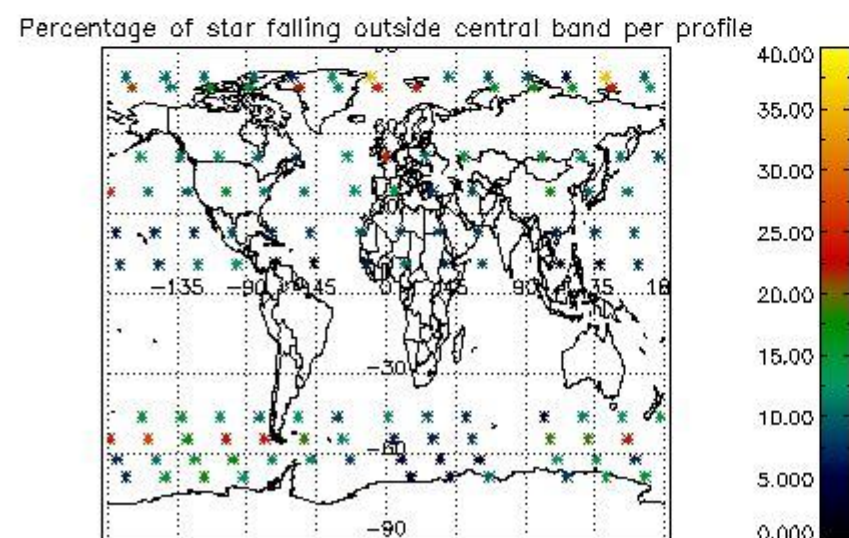
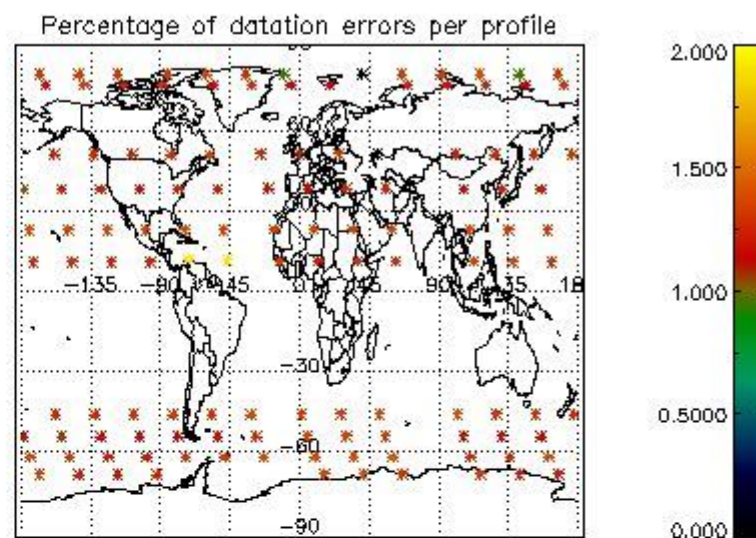
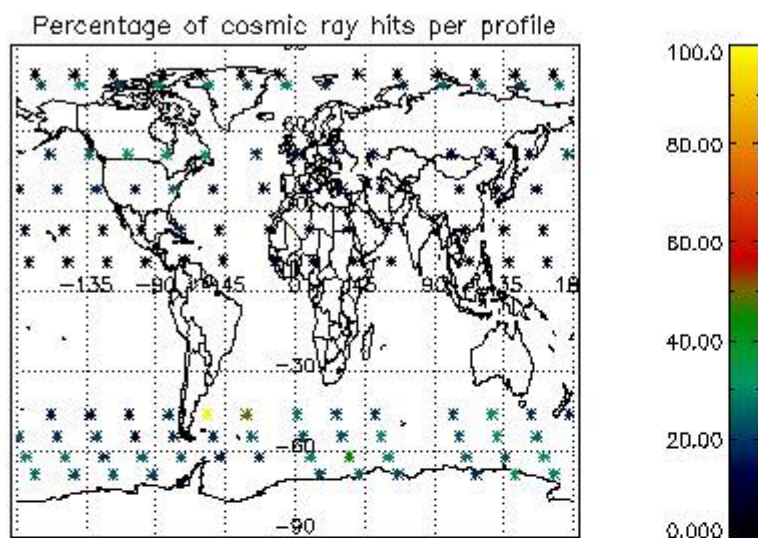


4.1.2 Plot level 1 quality information per product (time dependant): ENVISAT DESCENDING passes

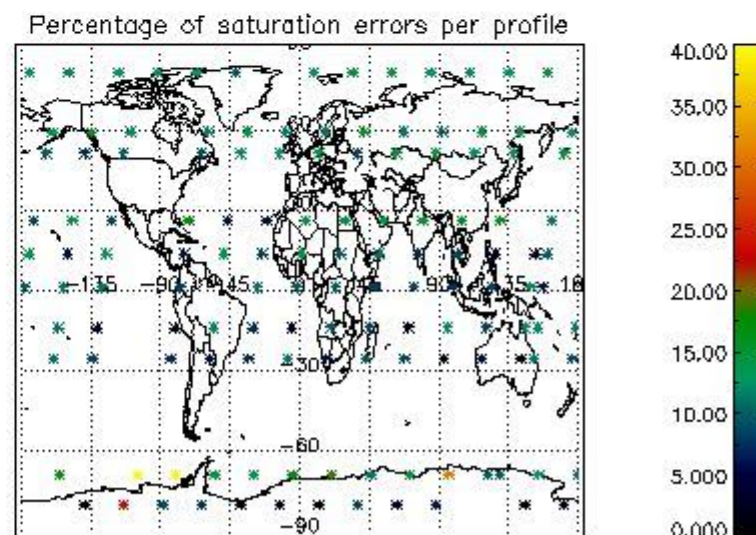
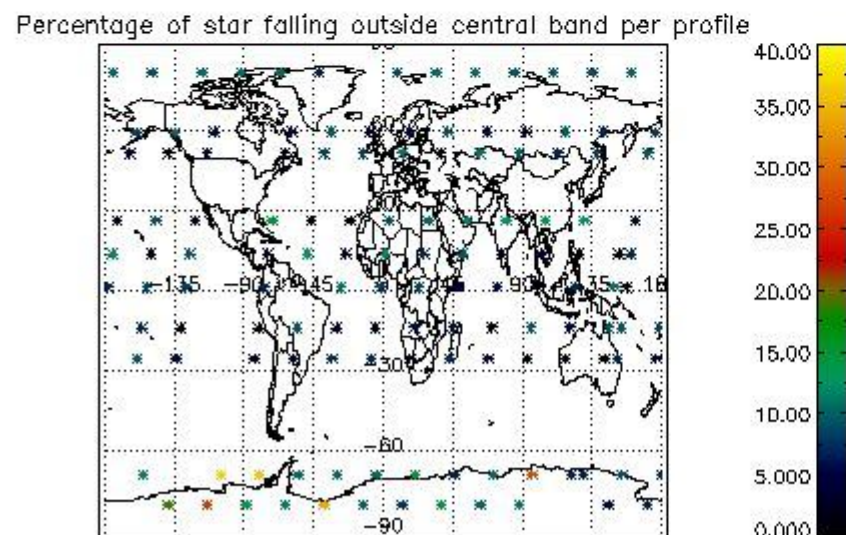
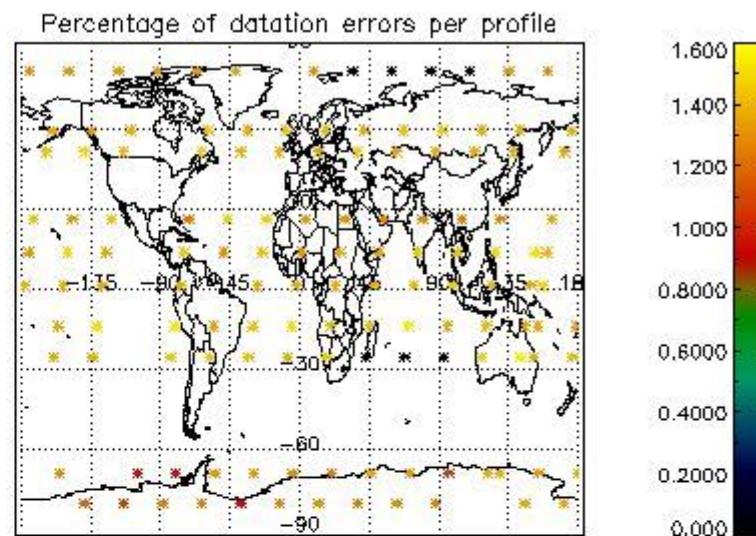
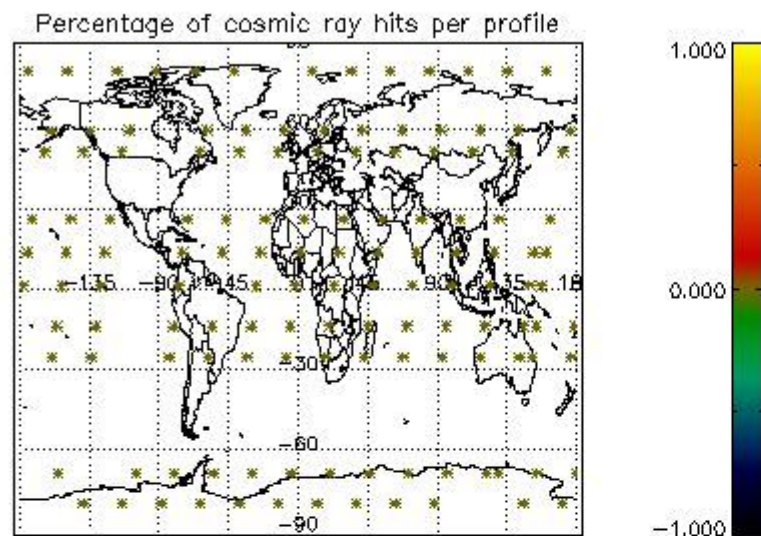


4.2 Plot quality information per product coming from level 1b processing (world map)

4.2.1 Plot level 1 quality information per product (world map): ENVISAT ASCENDING passes



4.2.2 Plot level 1 quality information per product (world map): ENVISAT DESCENDING passes



5. Trace gas profiles

5.1 Ozone statistics based on quality of products

The final quality of the products can be "measured" using the STD (Standard Deviation) attached to every point profile. This information is written to the parameter GOM_NL__2P/NL_LOCAL_SPECIES_DENSITY/o3_std of the level 2 products. The table below shows the statistics for given STD ranges.

The statistics are given with respect to the overall valid production:

- Products without fatal errors: GOM_NL__2P/MPH/PRODUCT_ERR=0
- Valid point profile: GOM_NL__2P/NL_LOCAL_SPECIES_DENSITY/pcd(0)=0

The 'Criteria' is applied to valid points of dark limb products:

- Products in dark limb illumination condition: GOM_NL__2P/NL_SUMMARY_QUALITY/obs_ill_cond=0
- Products without fatal errors: GOM_NL__2P/MPH/PRODUCT_ERR=0
- Valid point profile: GOM_NL__2P/NL_LOCAL_SPECIES_DENSITY/pcd(0)=0

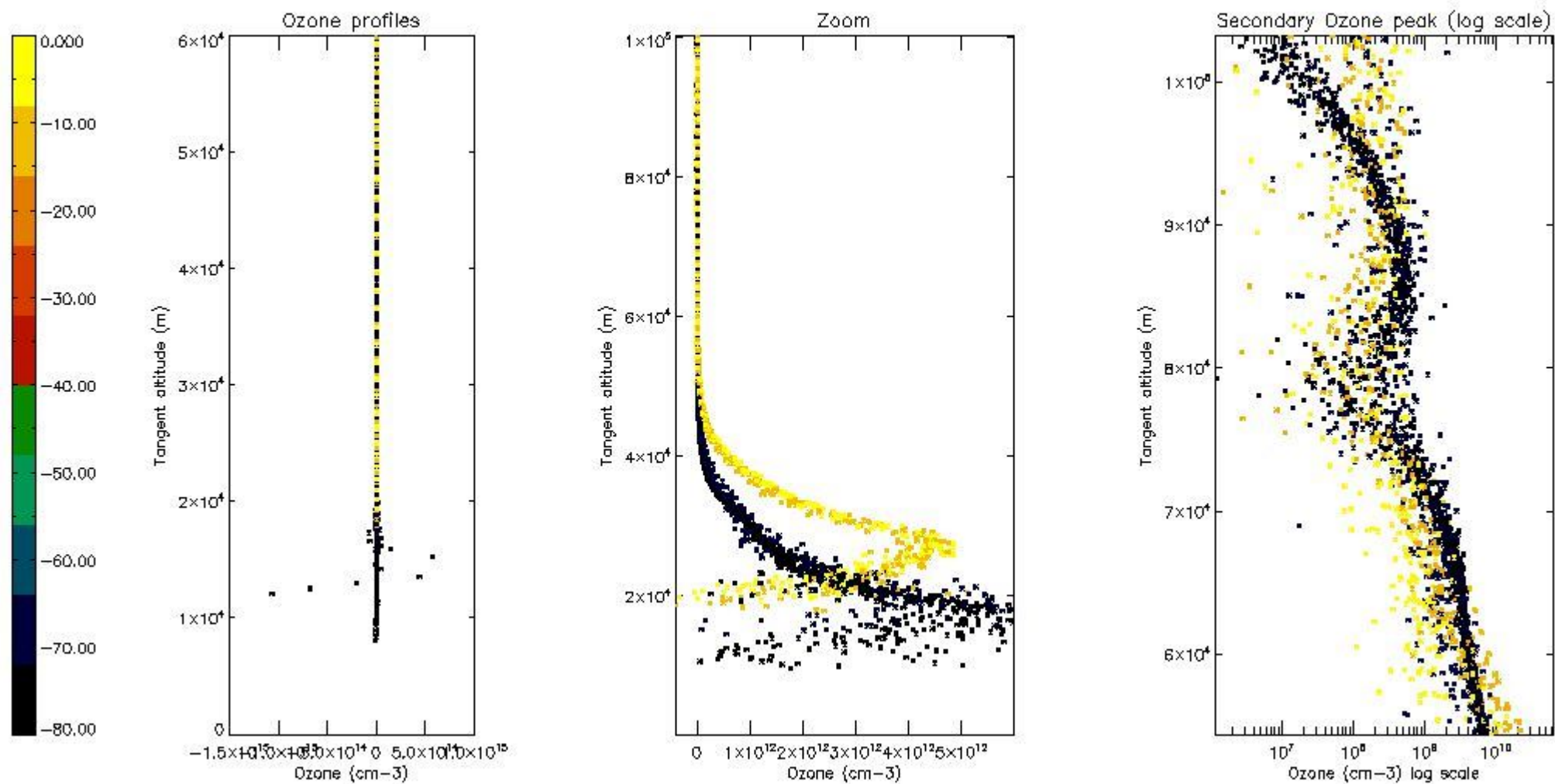
So, the table below shows the percentage of dark limb and valid observations for each criteria with respect to the overall valid daily observations.

Criteria	% of total production
All STD	30
STD < 20	16

STD < 10	12
STD < 5	9

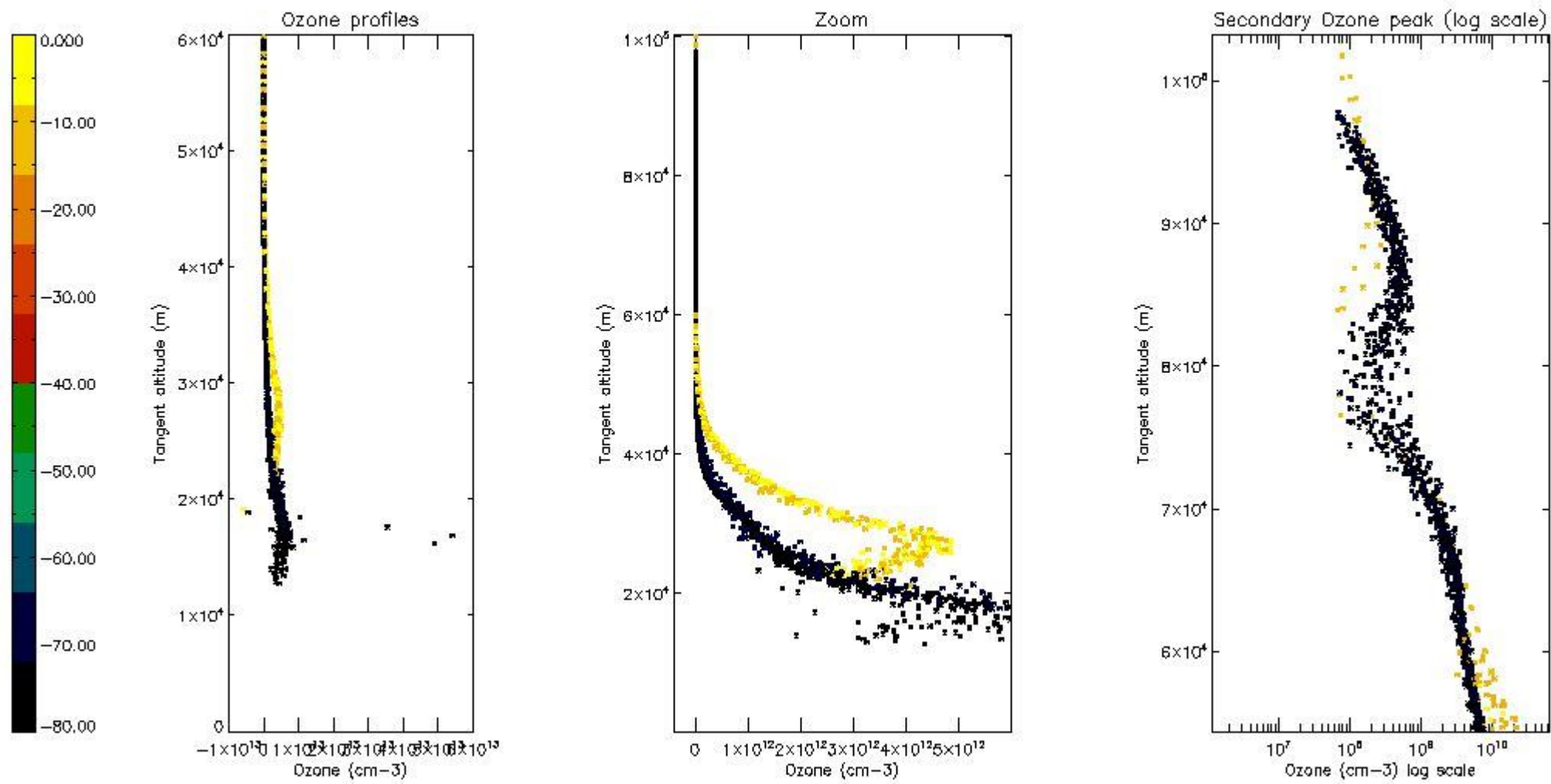
5.2 Plot ozone profiles for all STD (dark without errors)

The colorbar represents the latitude.



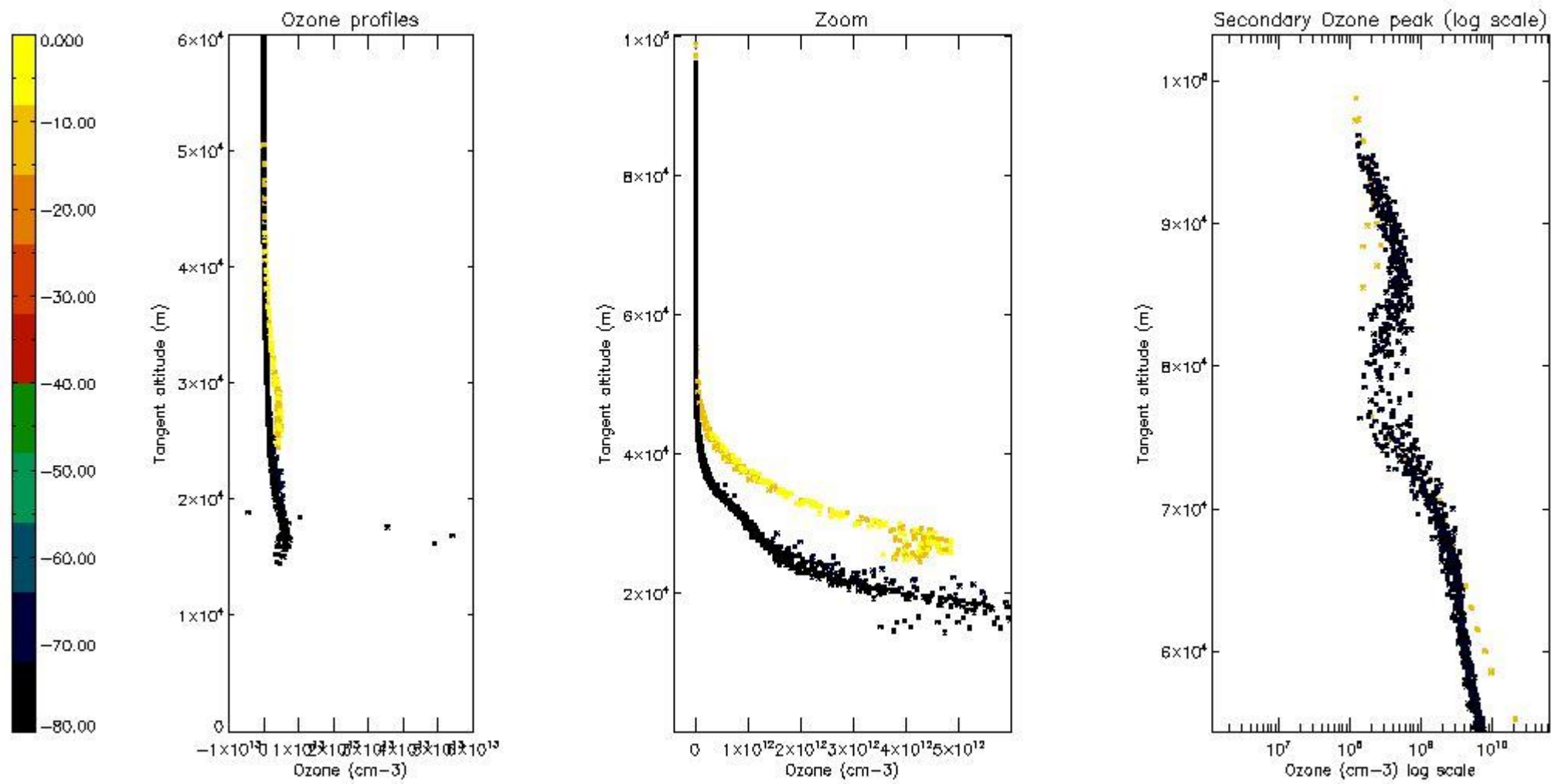
5.3 Plot ozone profiles where STD < 20% (dark without errors)

The colorbar represents the latitude.



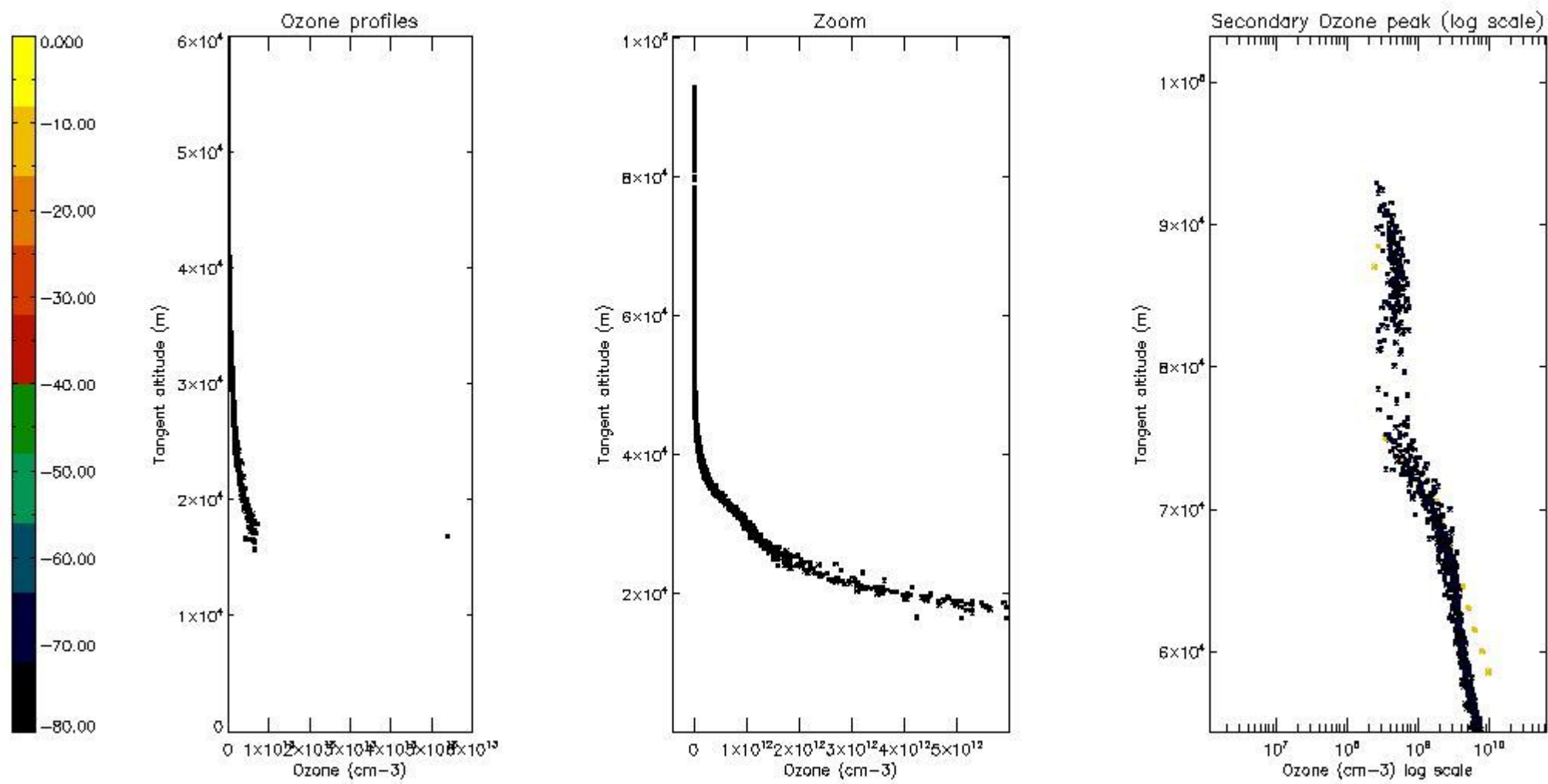
5.4 Plot ozone profiles where STD < 10% (dark without errors)

The colorbar represents the latitude.



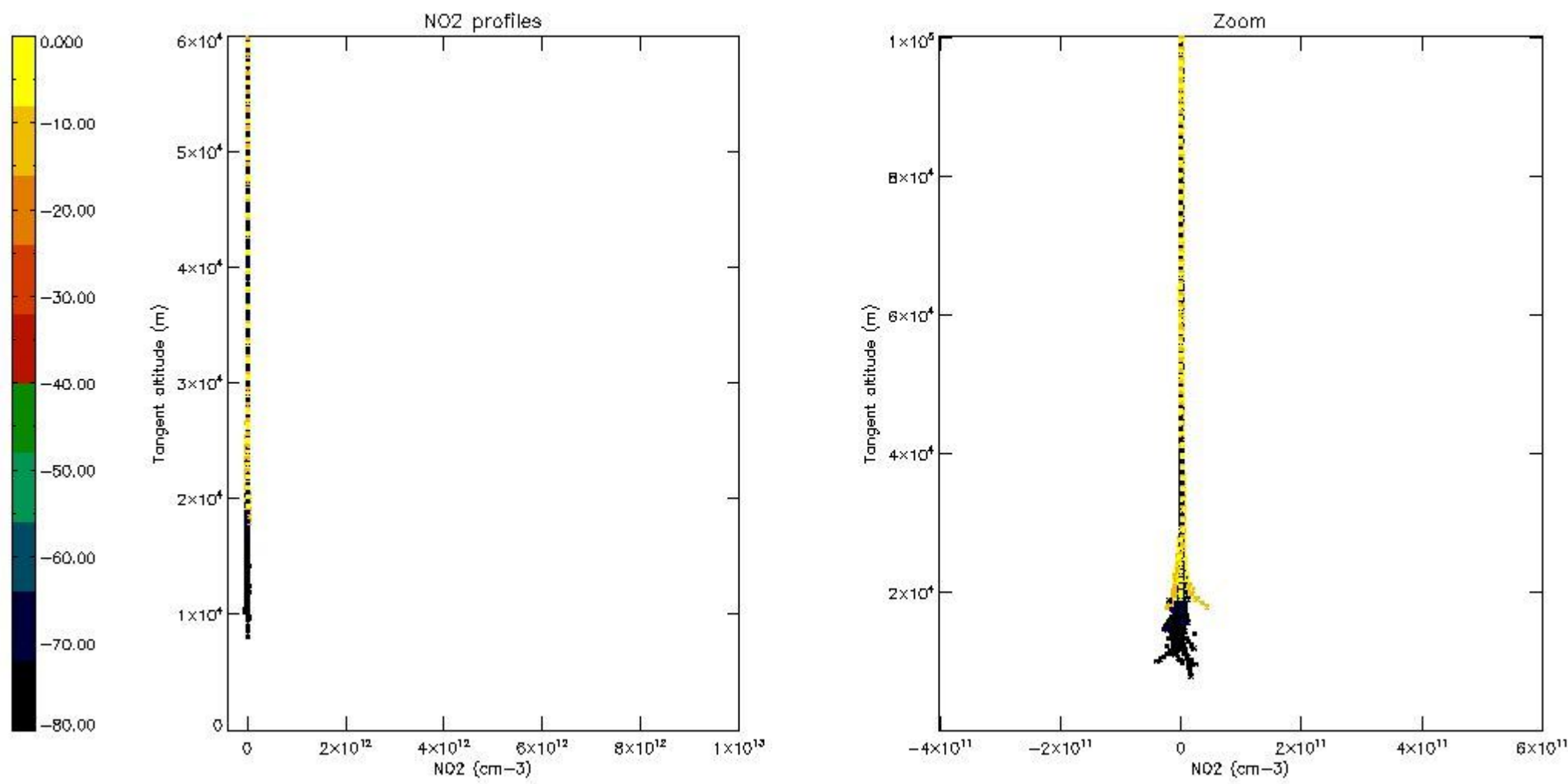
5.5 Plot ozone profiles where STD < 5% (dark without errors)

The colorbar represents the latitude.



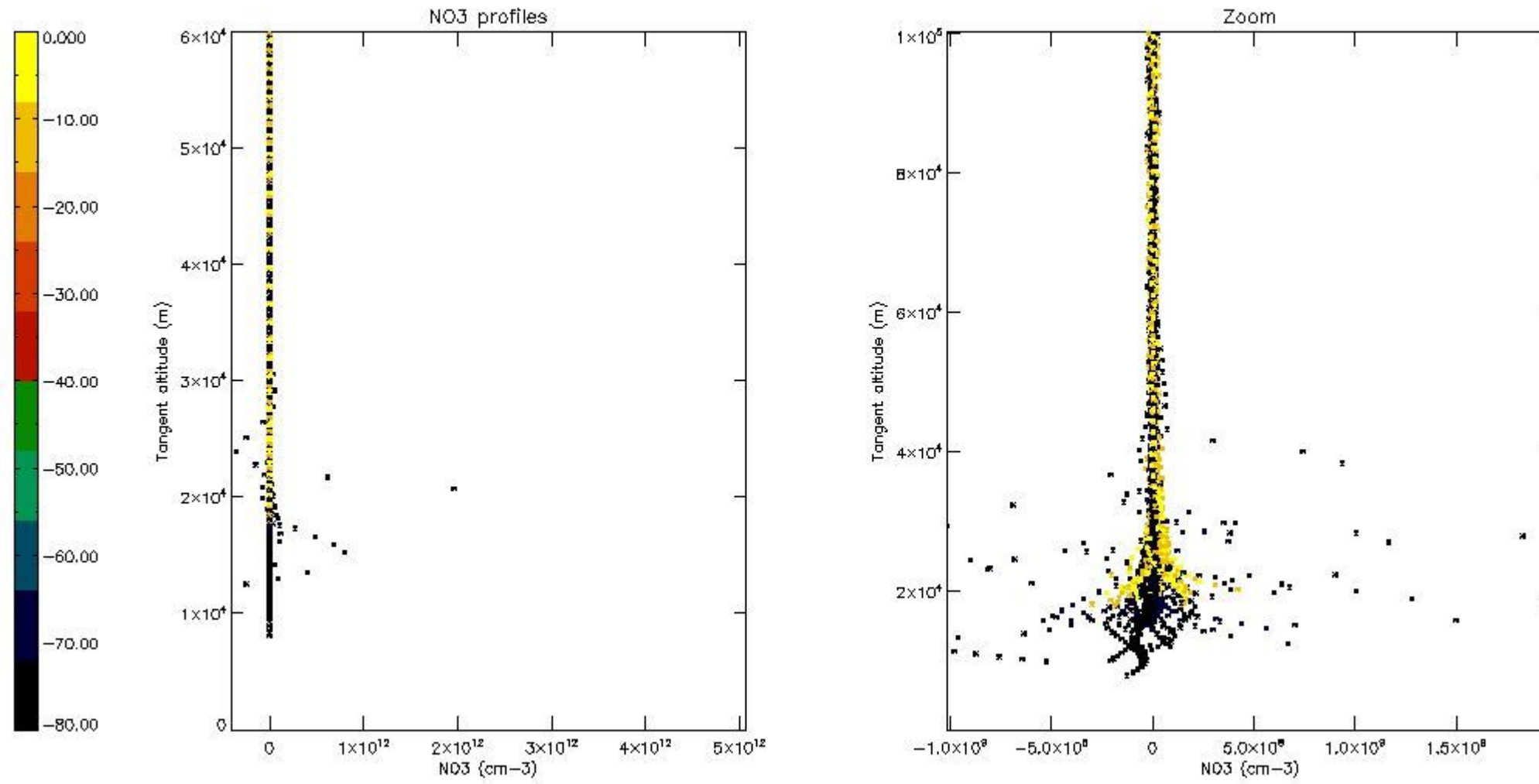
5.6 Plot NO₂ profiles for all STD (dark without errors)

The colorbar represents the latitude.



5.7 Plot NO3 profiles for all STD (dark without errors)

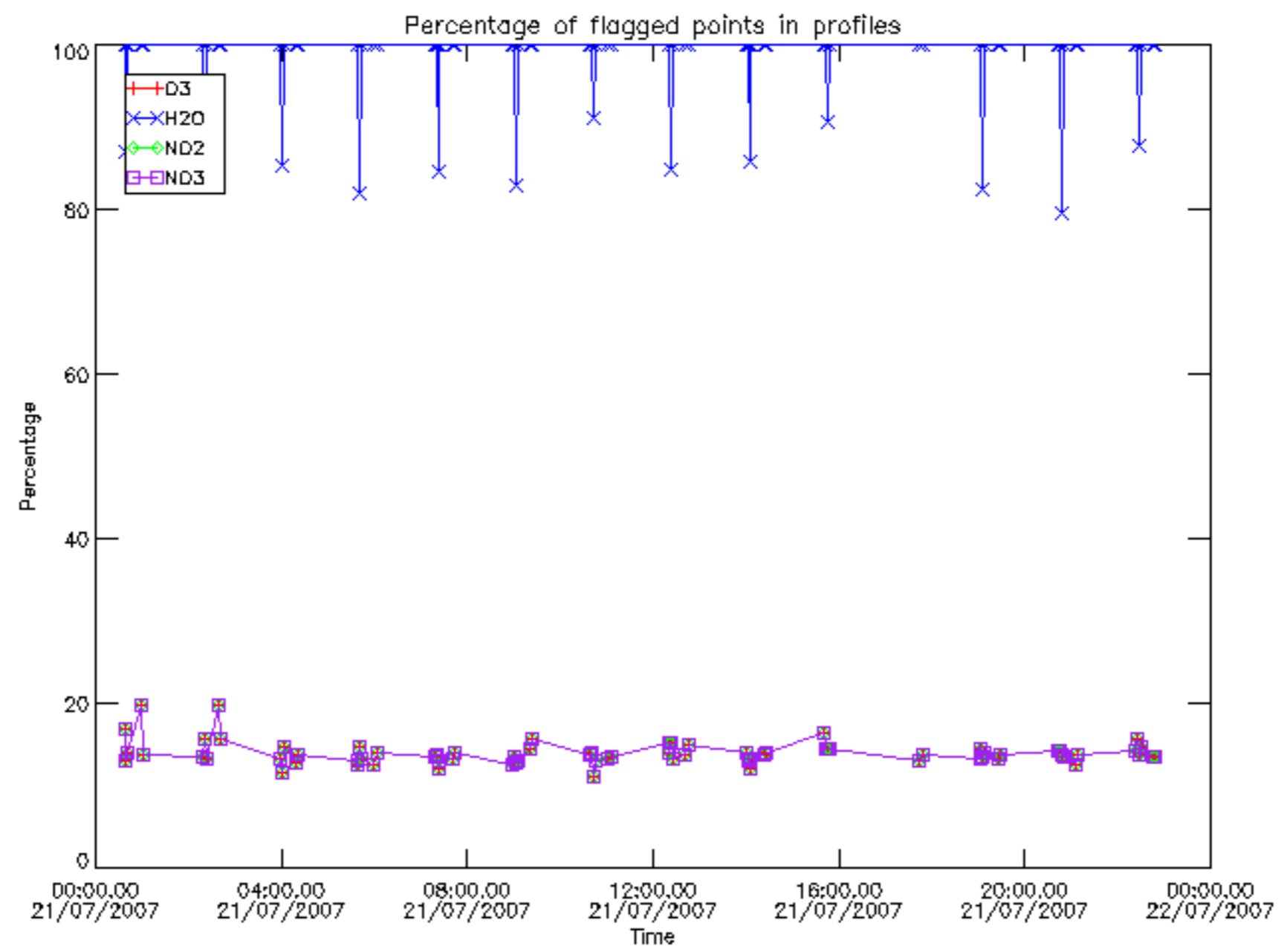
The colorbar represents the latitude.



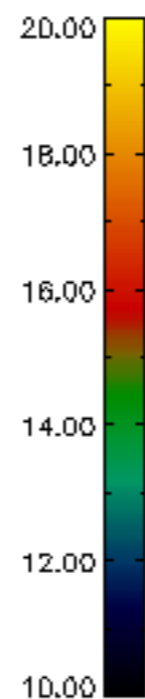
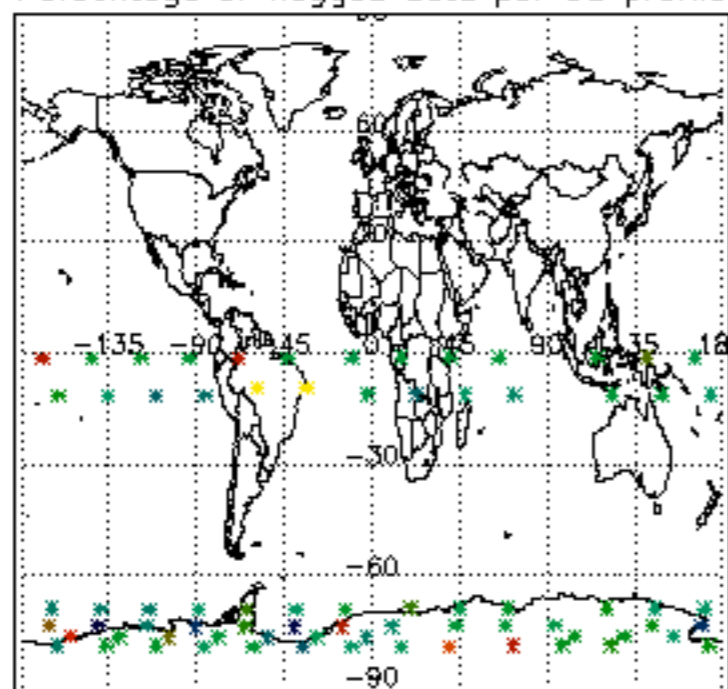
6. Auxiliary Data Files used for the production reported in section 2

The number reported in the third column indicates since which file (see list in section 2) the corresponding auxiliary file has been used. The fourth column is the date of those product files.

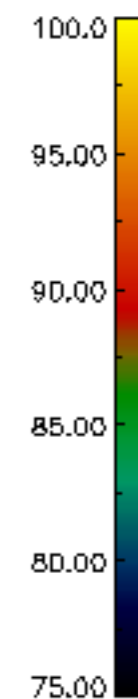
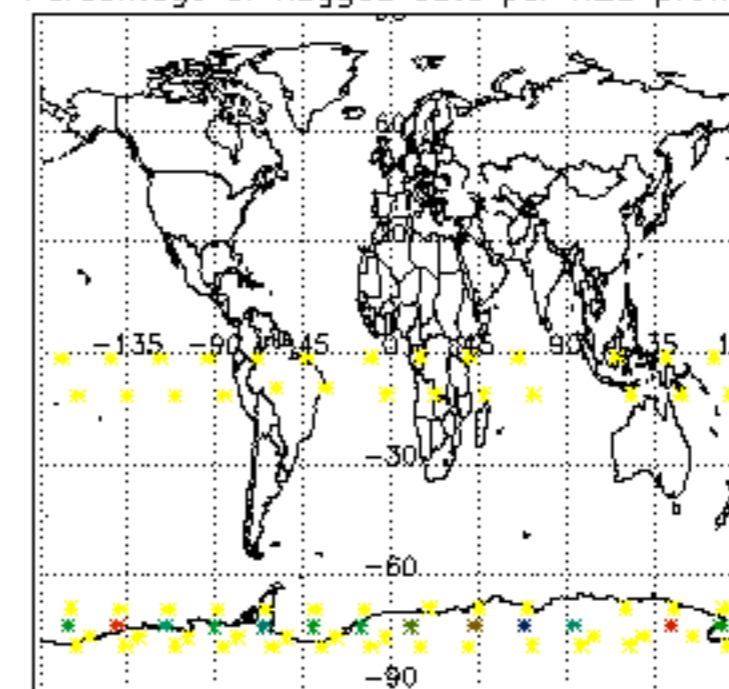
Type	Auxiliary Filename	Used since product	Used since product date
INST_PHYS_CHARACTERISTICS	GOM_INS_AXVIEC20091111_143220_20030716_120000_20500101_000000	1	21-JUL-2007 00:00:43
LEVEL-2_PROC_CONFIG	GOM_PR2_AXVIEC20091111_152718_20020301_000000_20500101_000000	1	21-JUL-2007 00:00:43
CROSS_SECTIONS_FILE	GOM_CRS_AXVIEC20091111_154832_20020301_000000_20500101_000000	1	21-JUL-2007 00:00:43



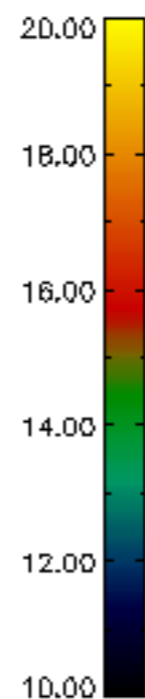
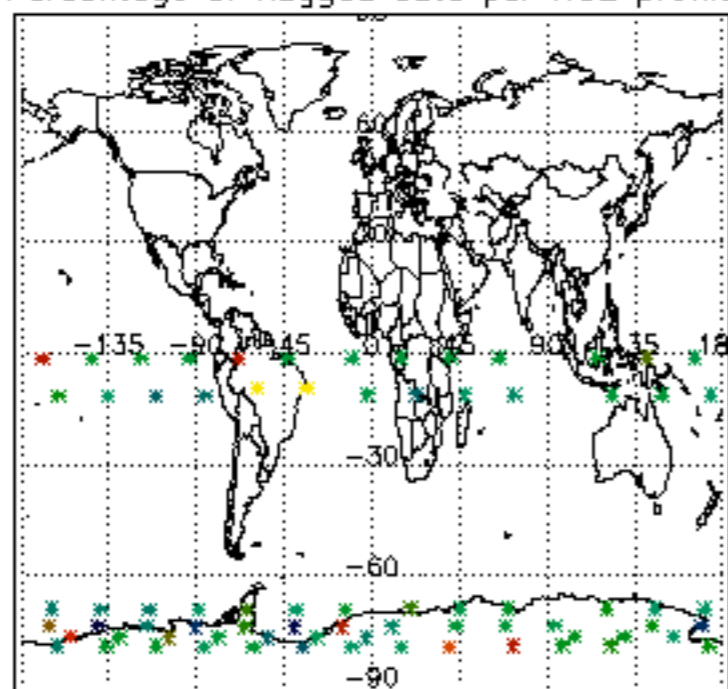
Percentage of flagged data per D3 profile



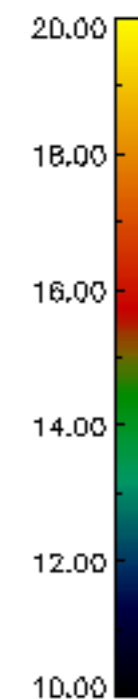
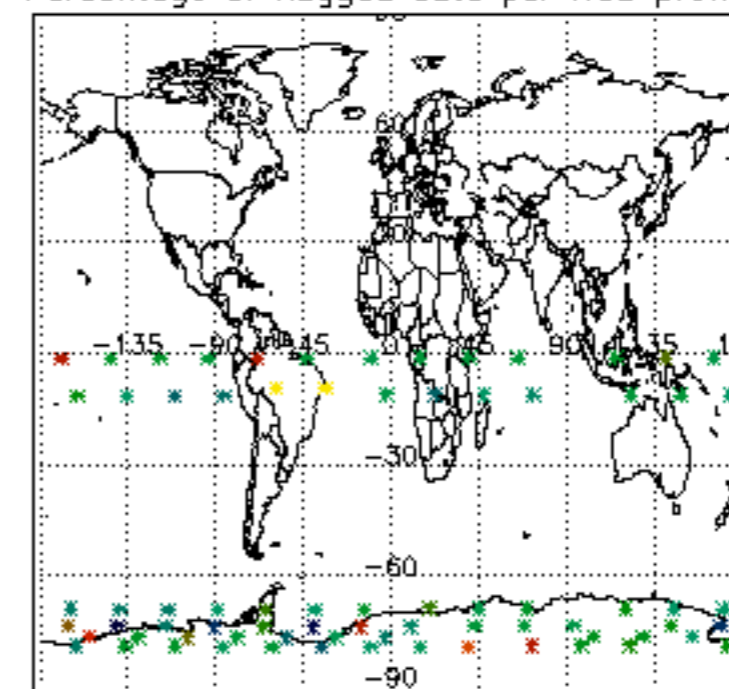
Percentage of flagged data per H2O profile

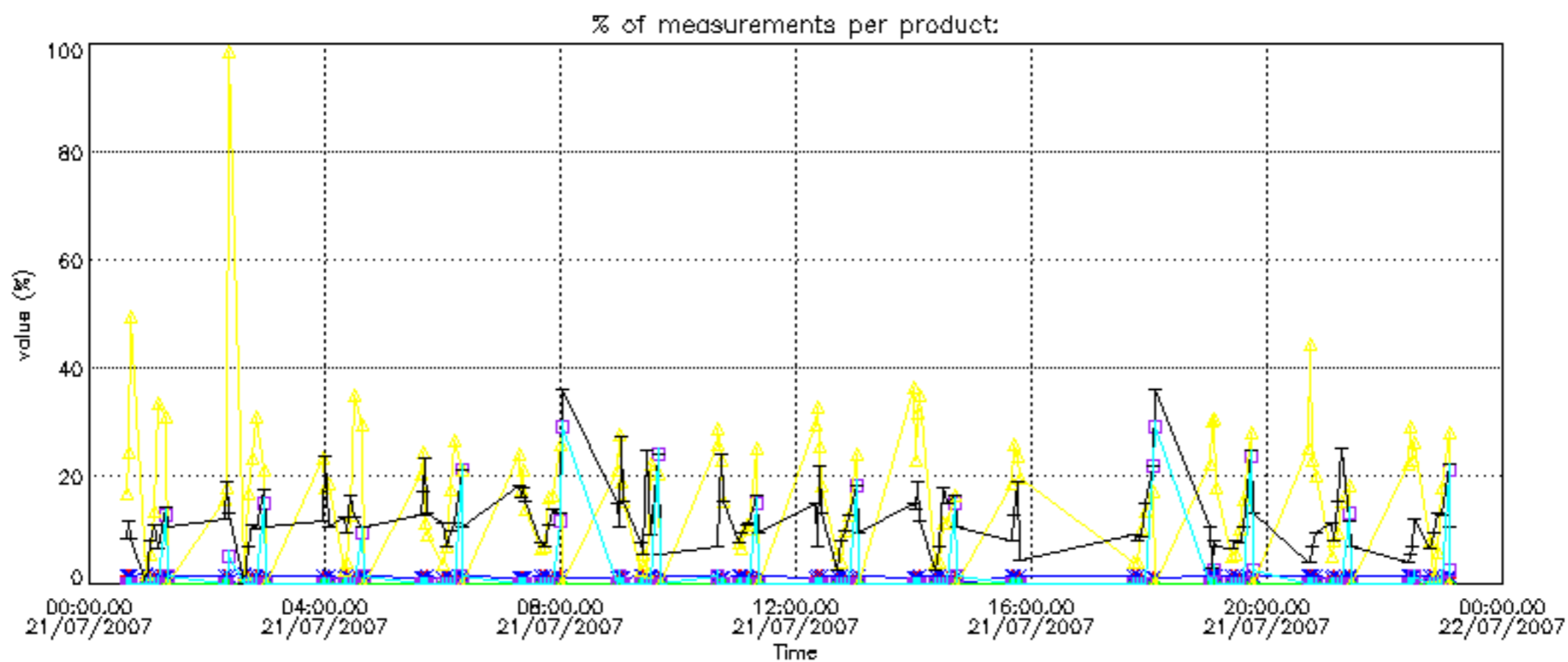


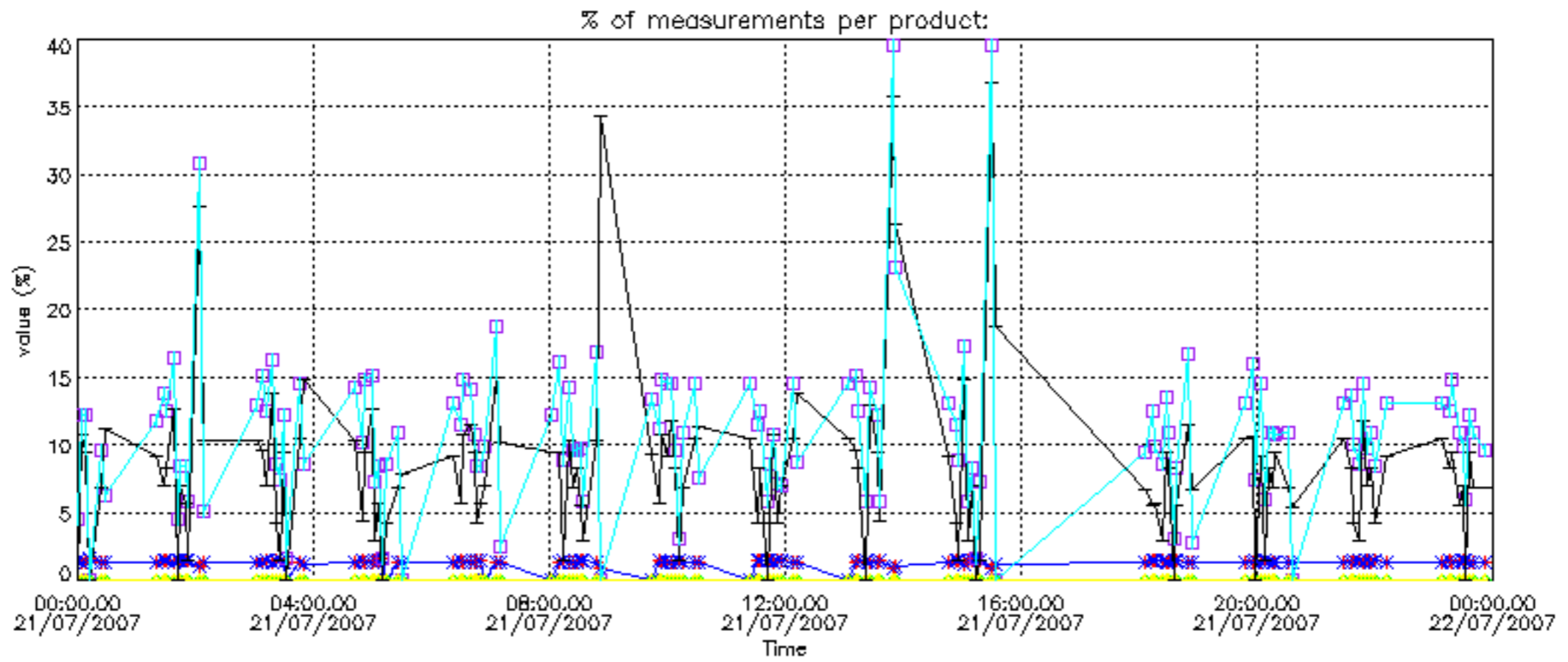
Percentage of flagged data per NO2 profile



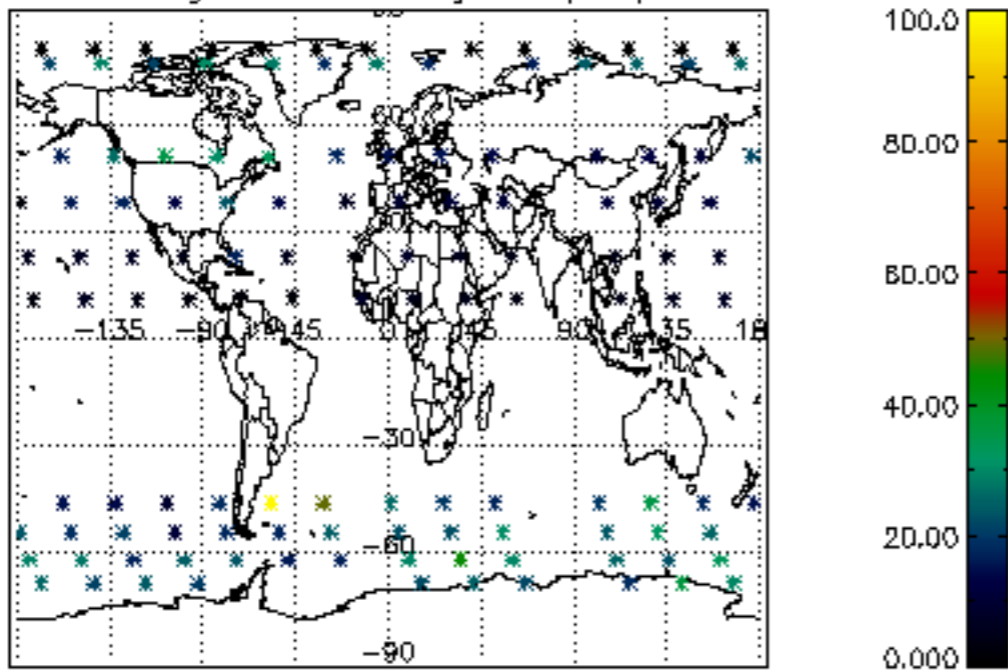
Percentage of flagged data per NO3 profile



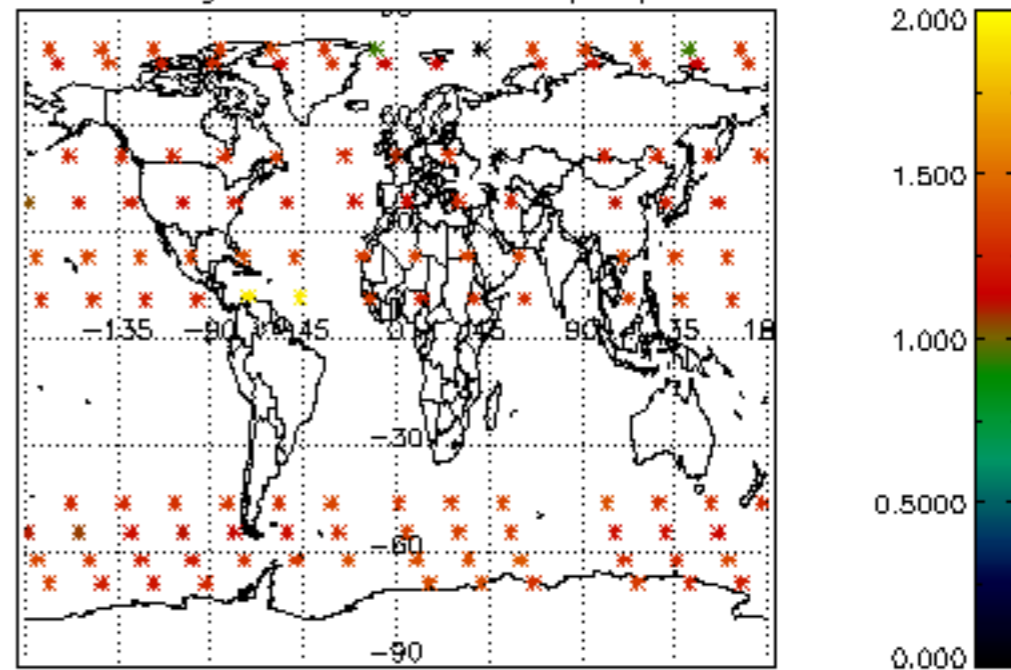




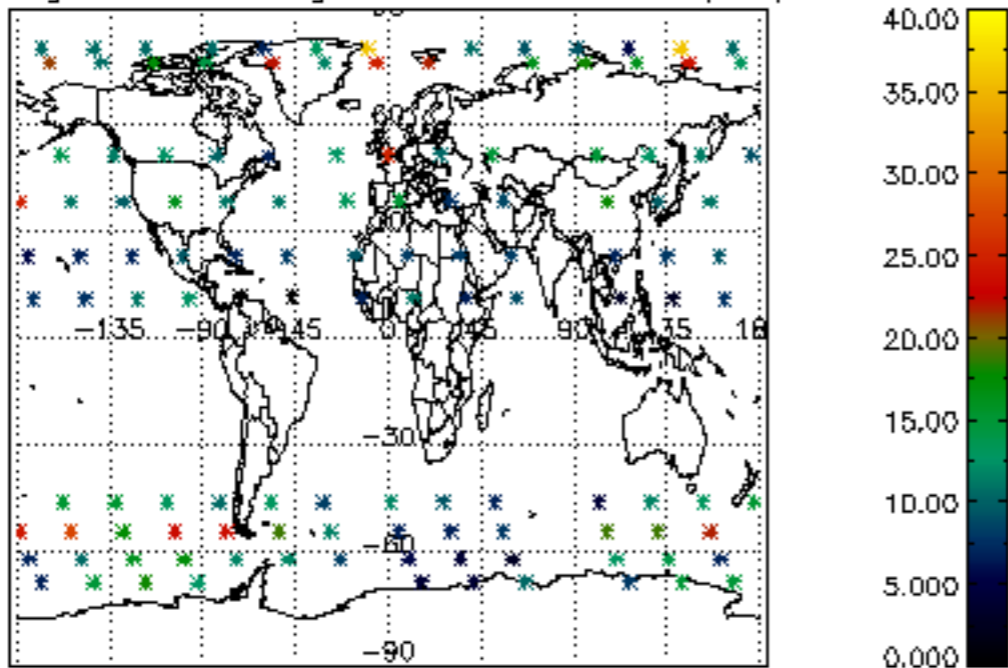
Percentage of cosmic ray hits per profile



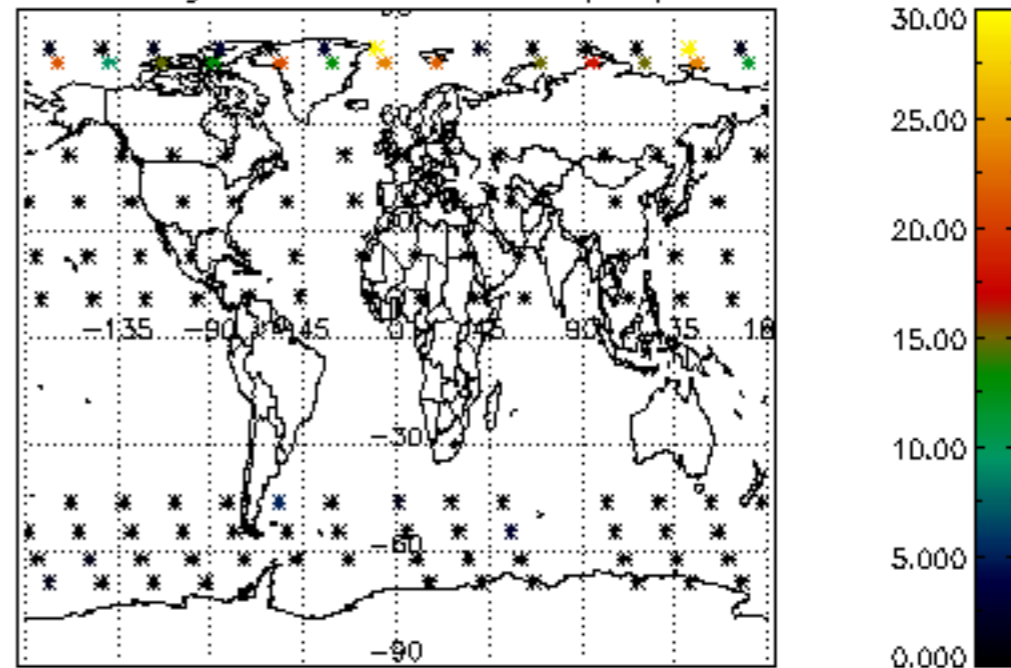
Percentage of datation errors per profile



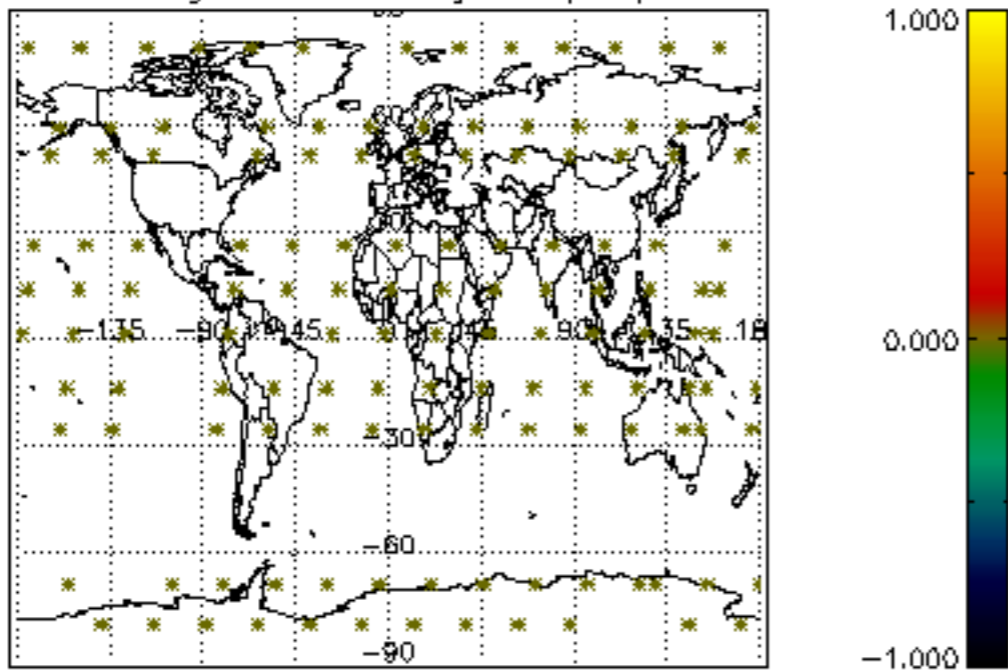
Percentage of star falling outside central band per profile



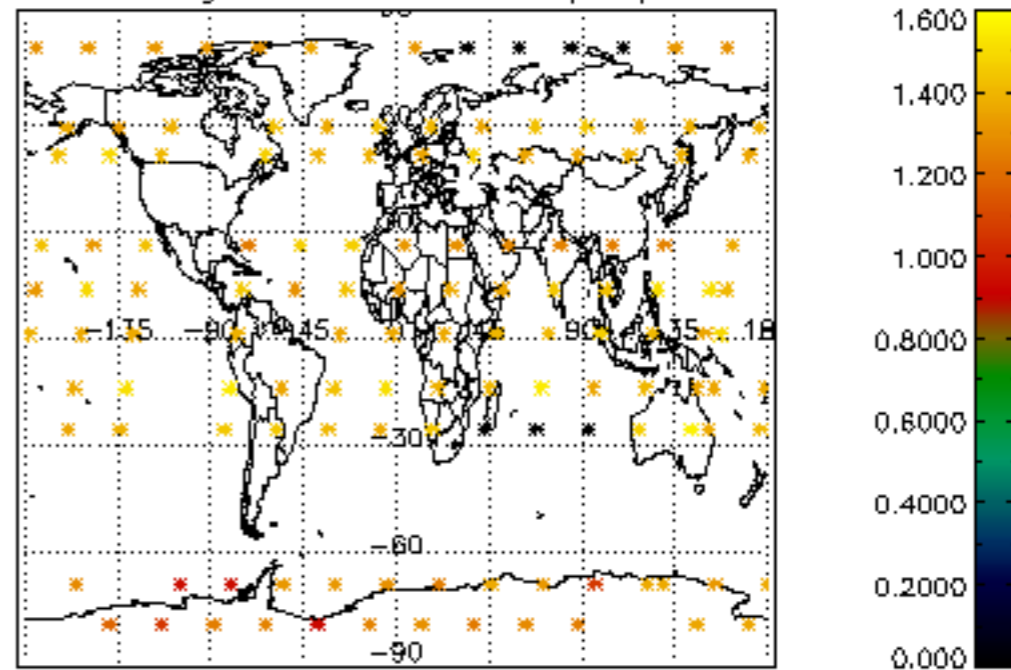
Percentage of saturation errors per profile



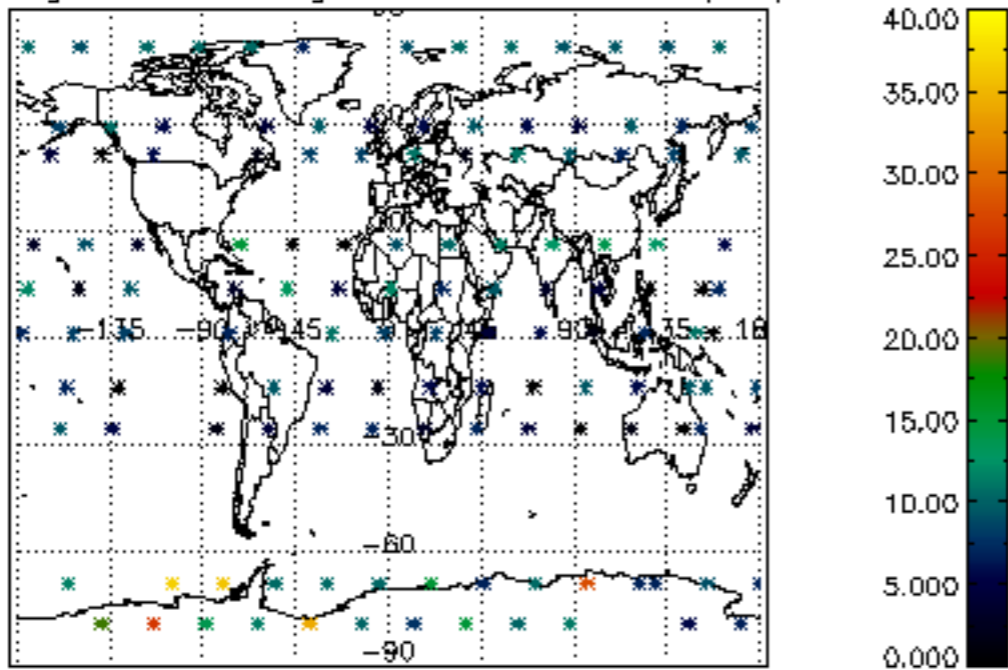
Percentage of cosmic ray hits per profile



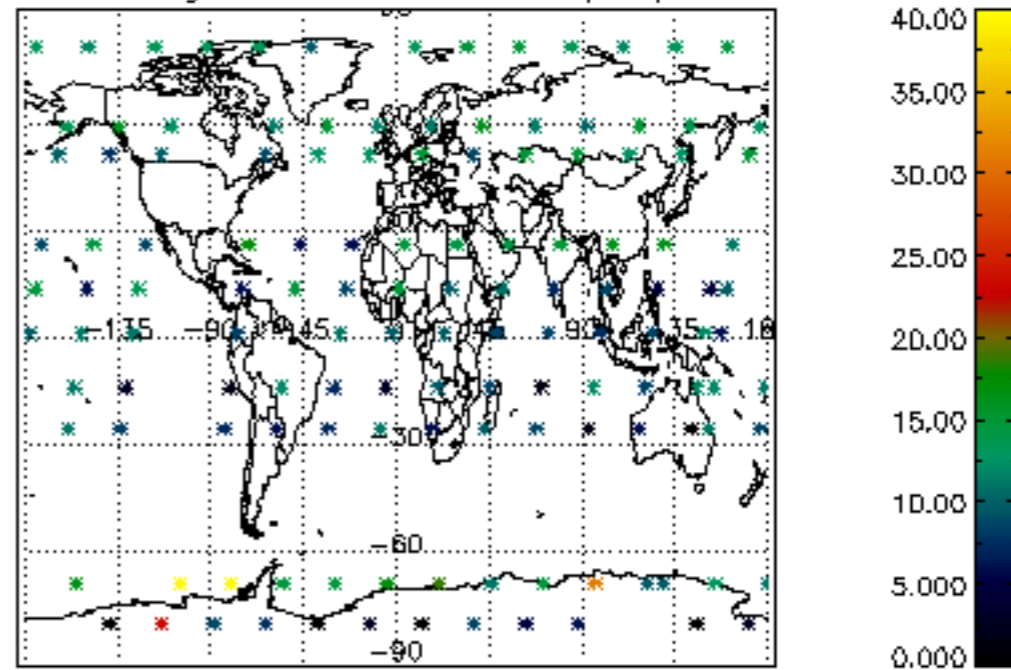
Percentage of datation errors per profile

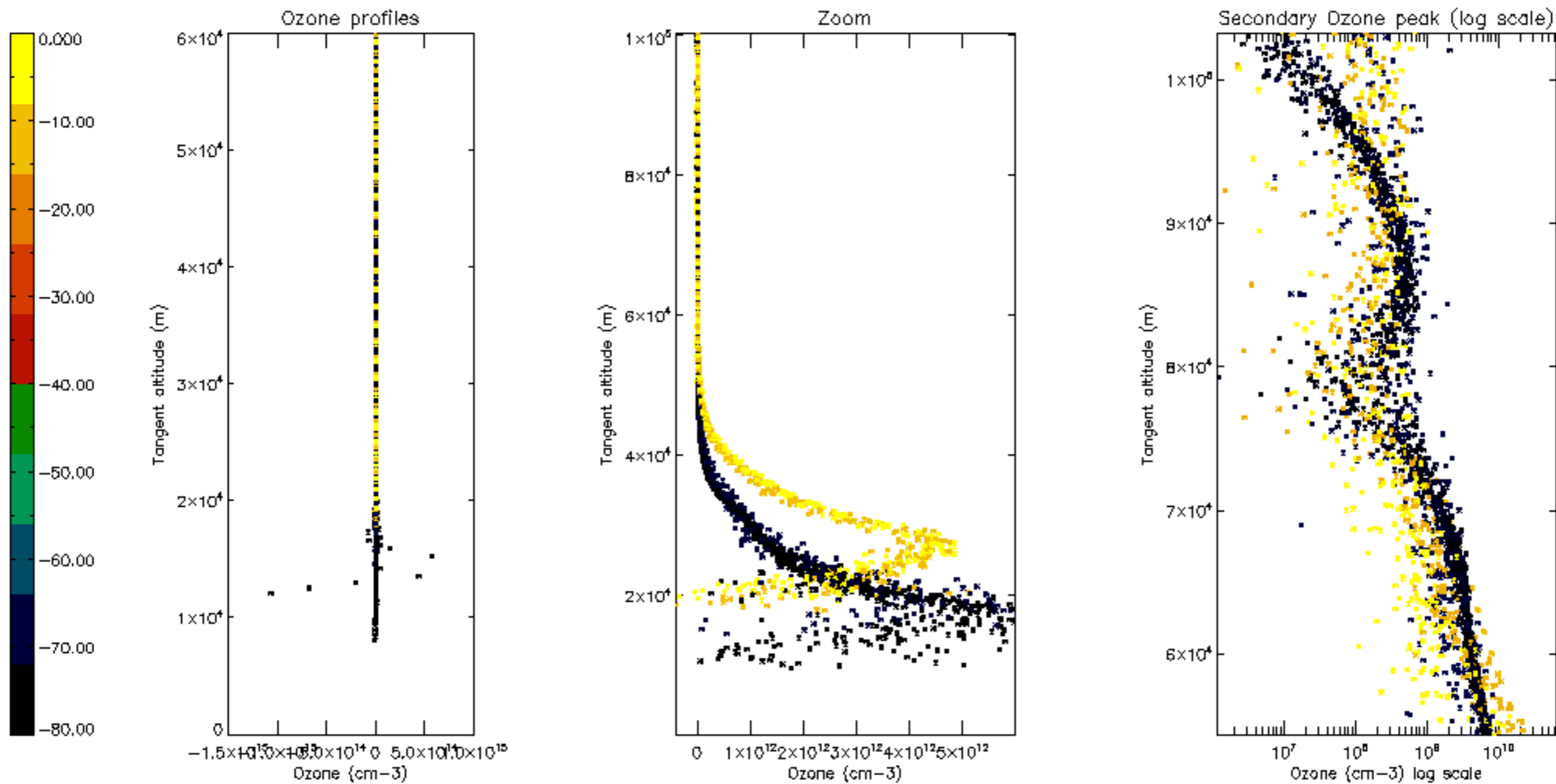


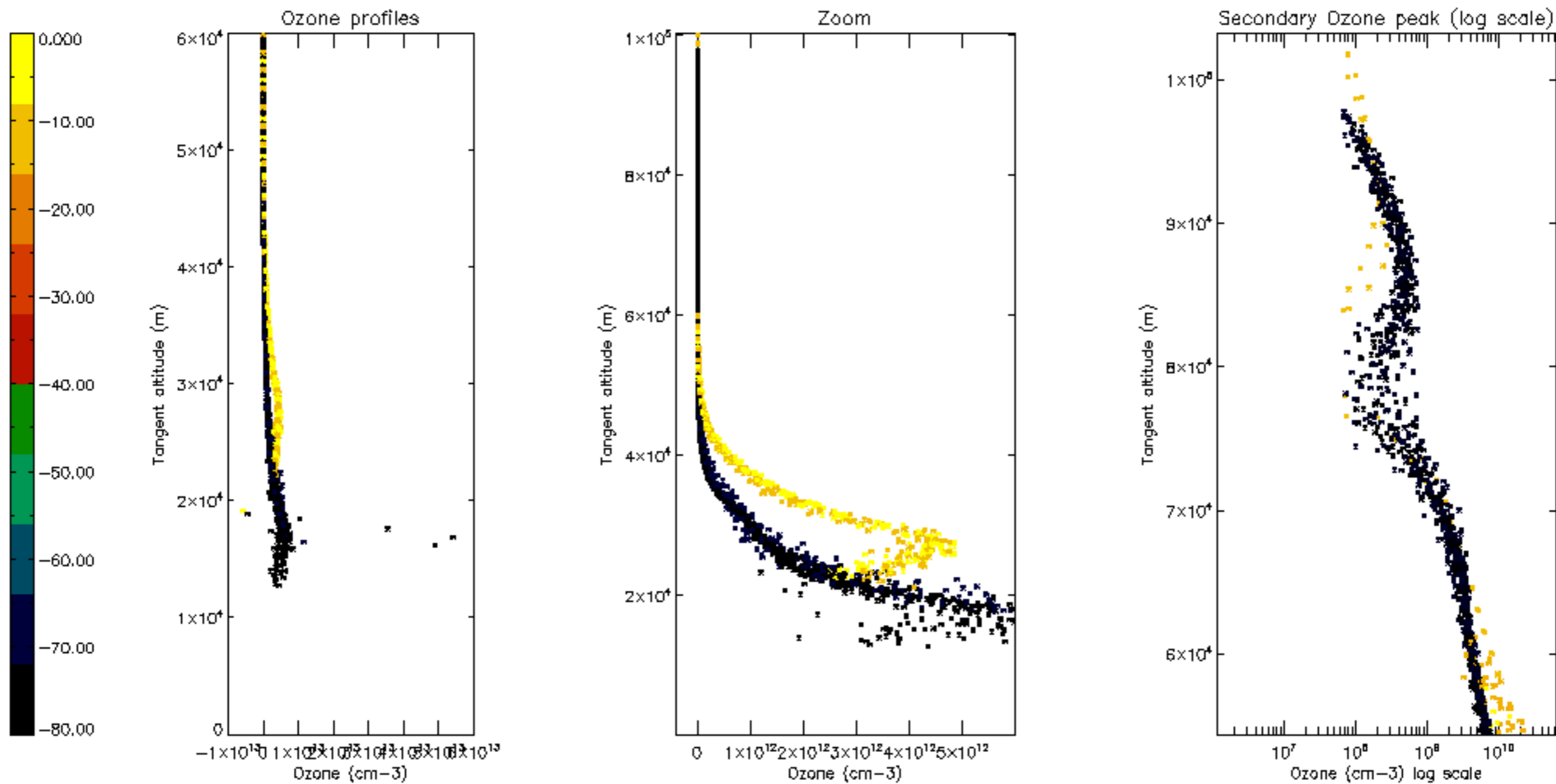
Percentage of star falling outside central band per profile

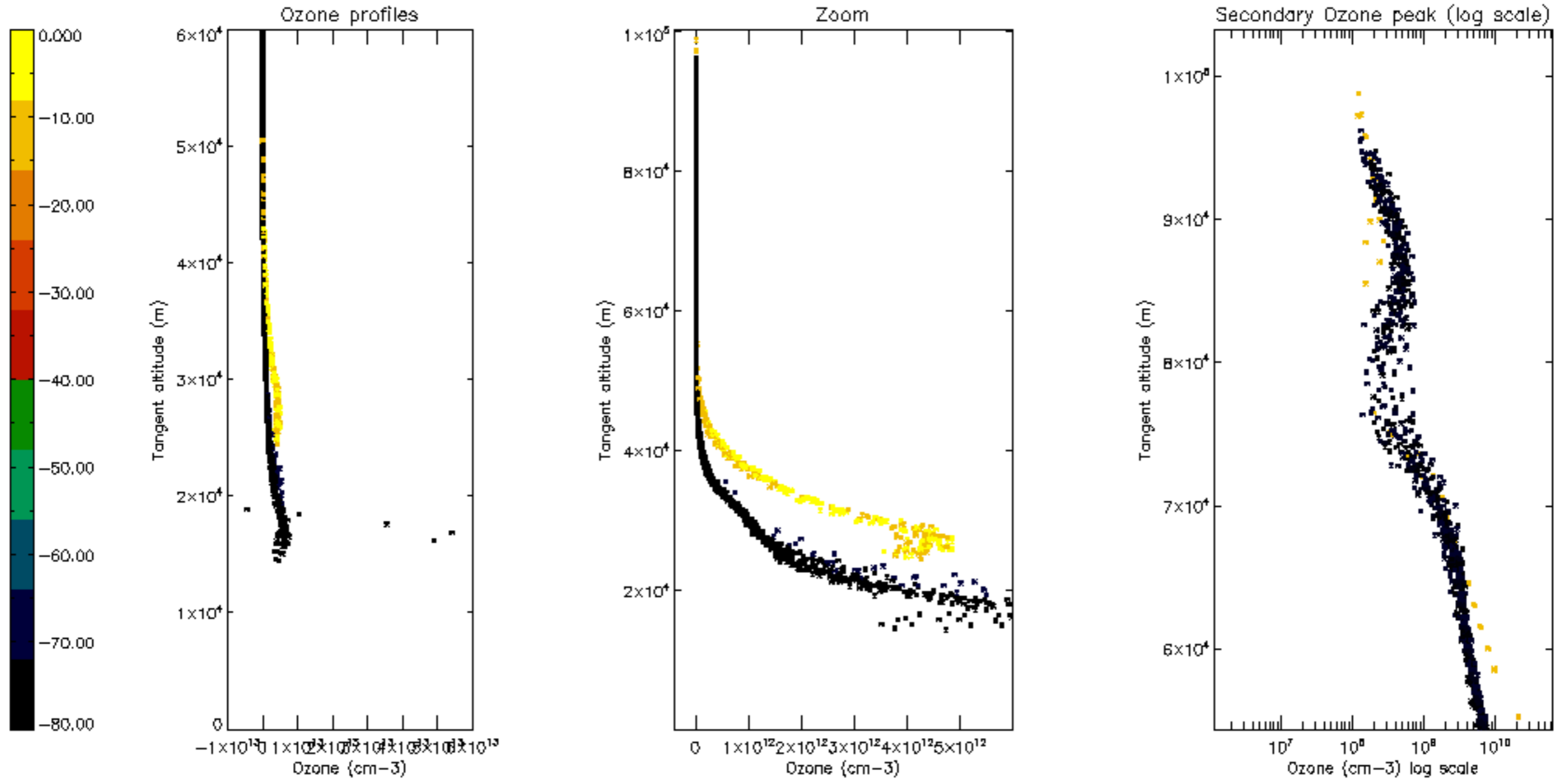


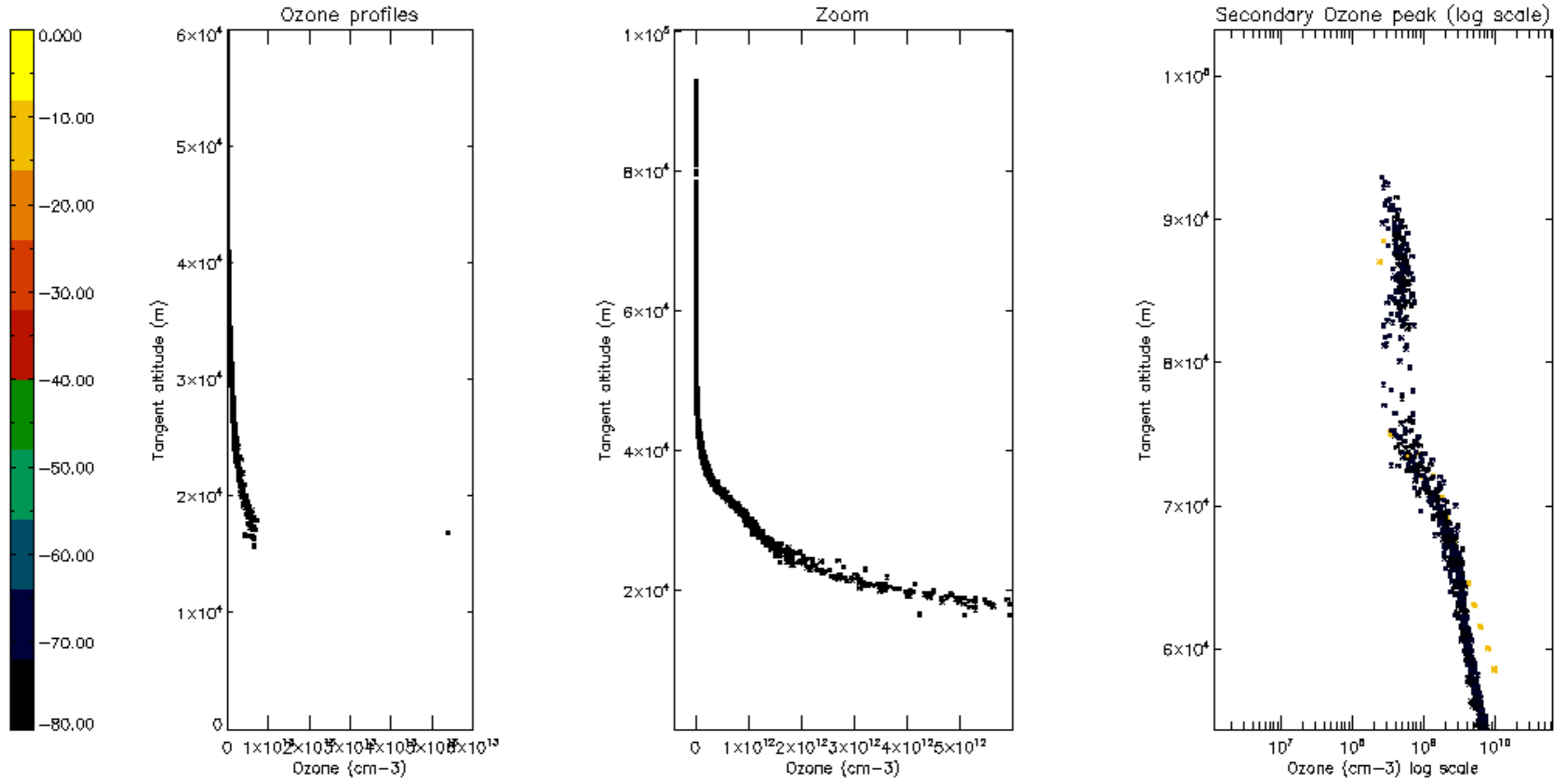
Percentage of saturation errors per profile

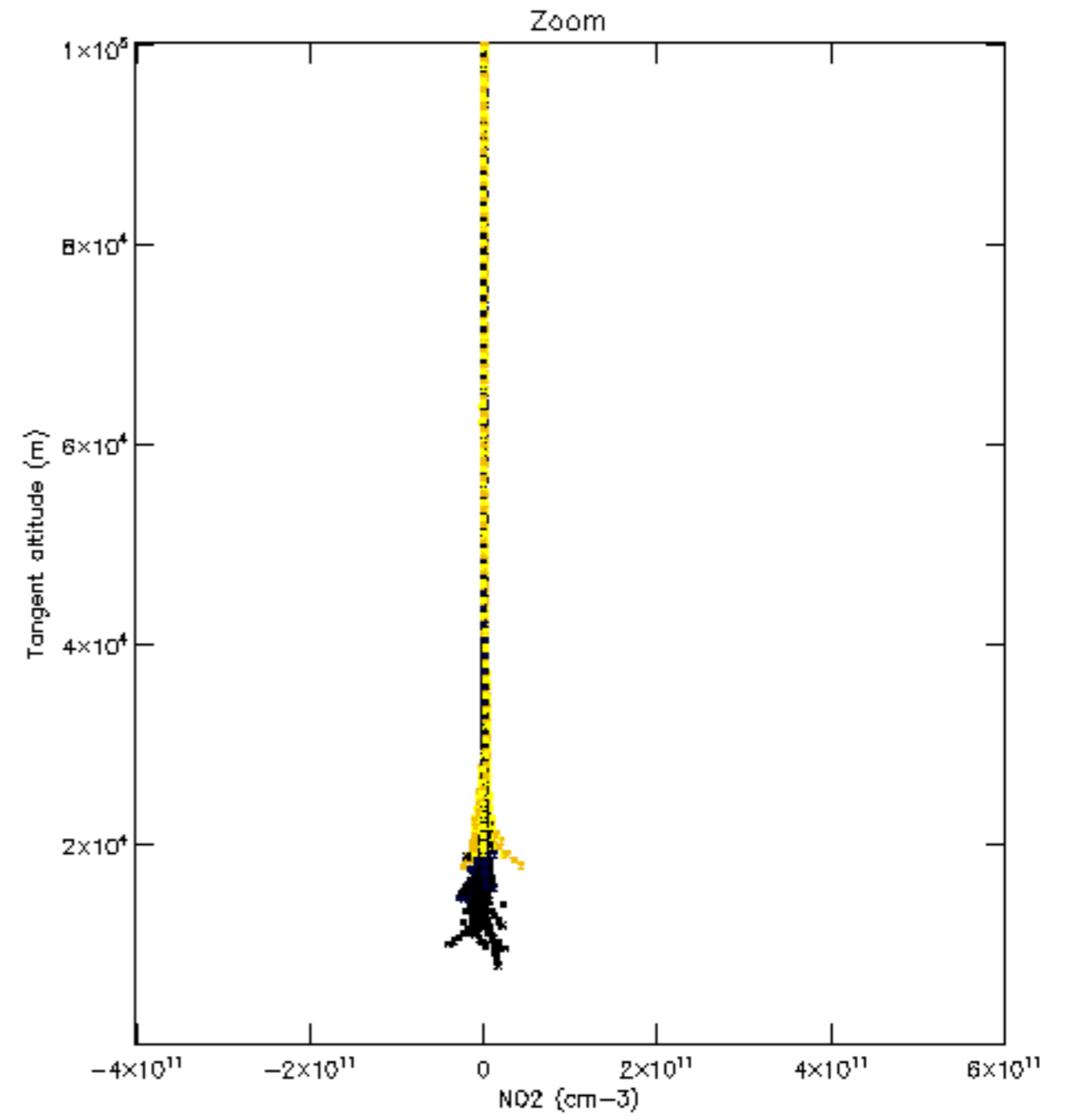
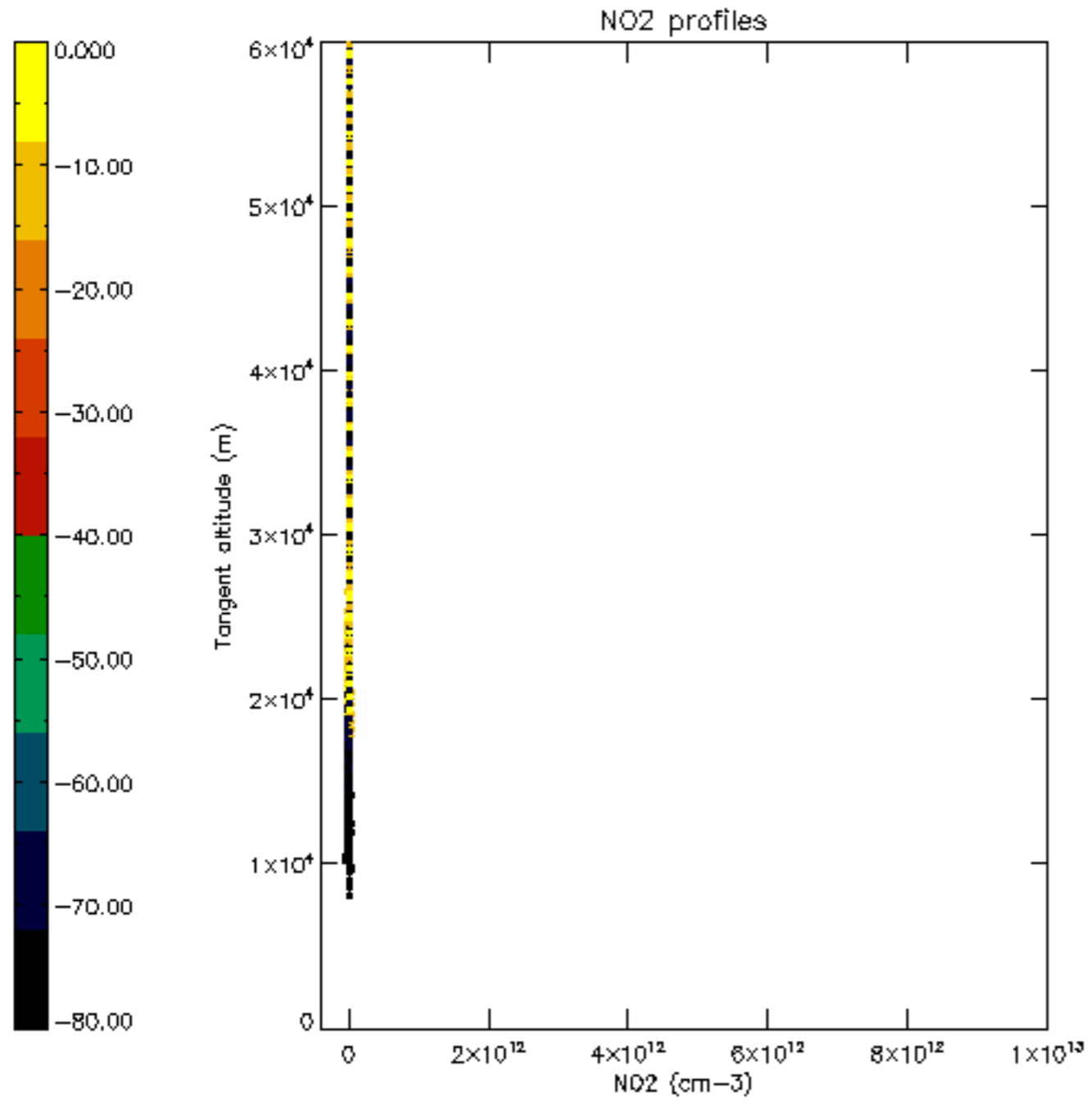


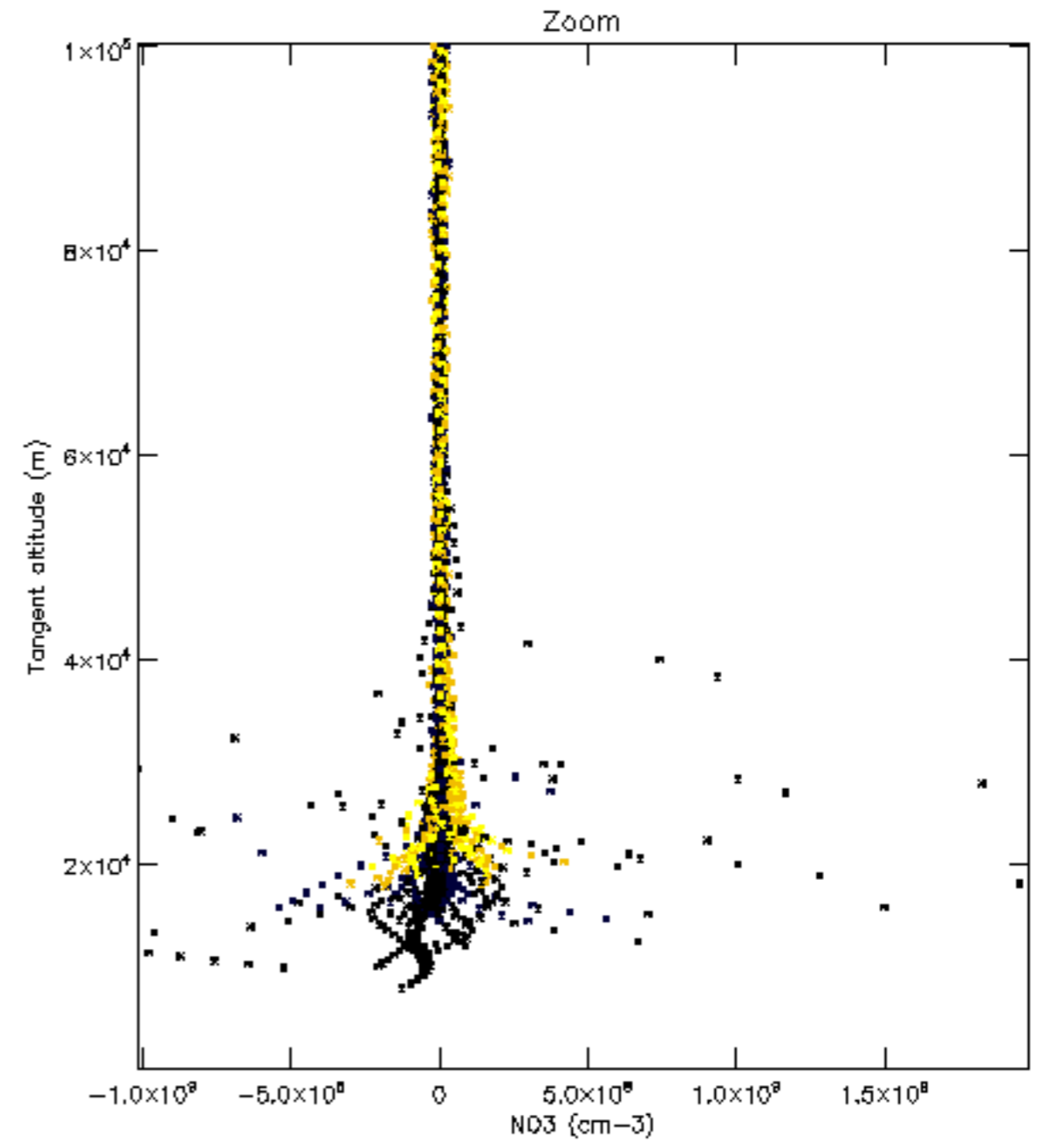
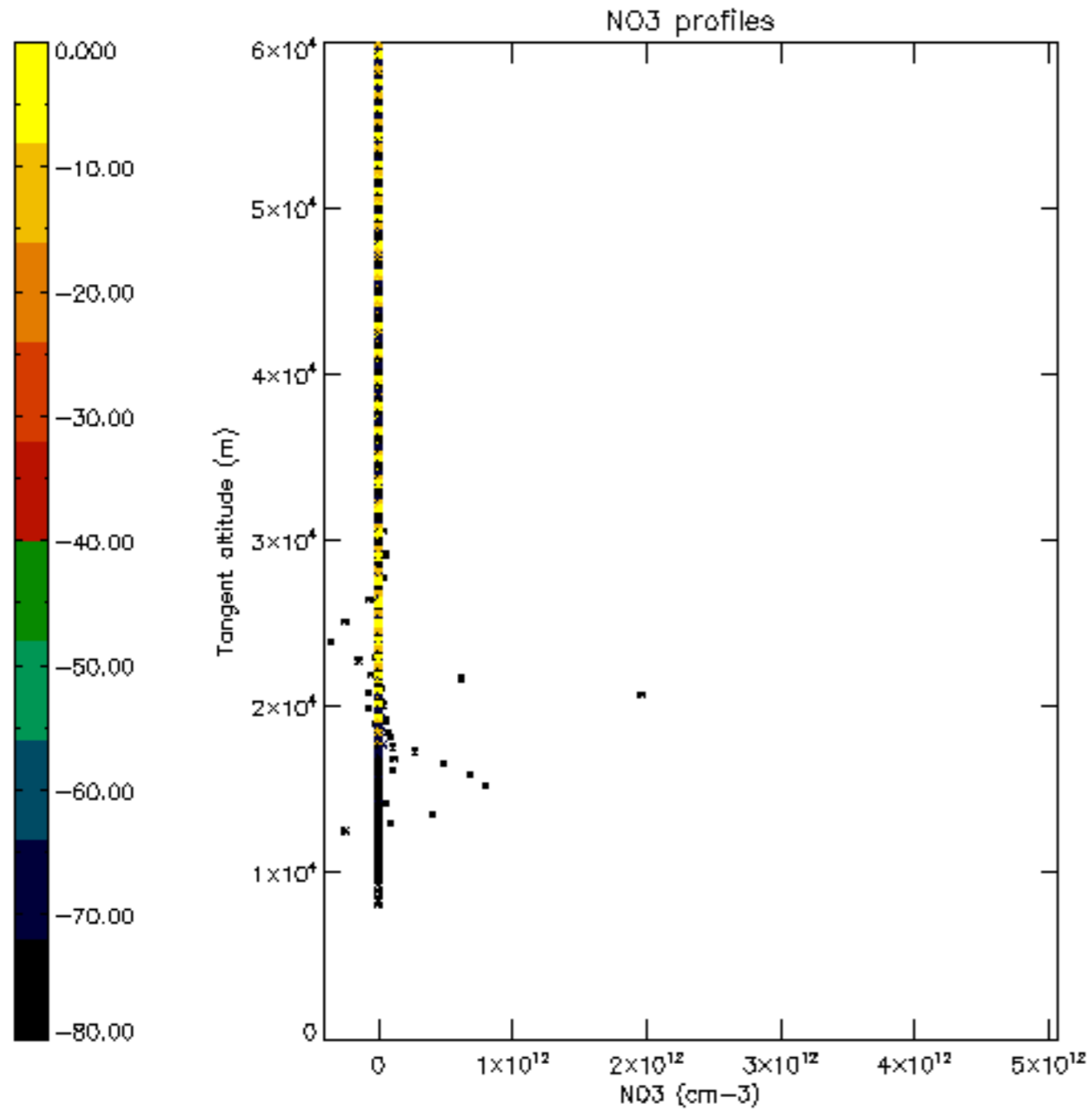


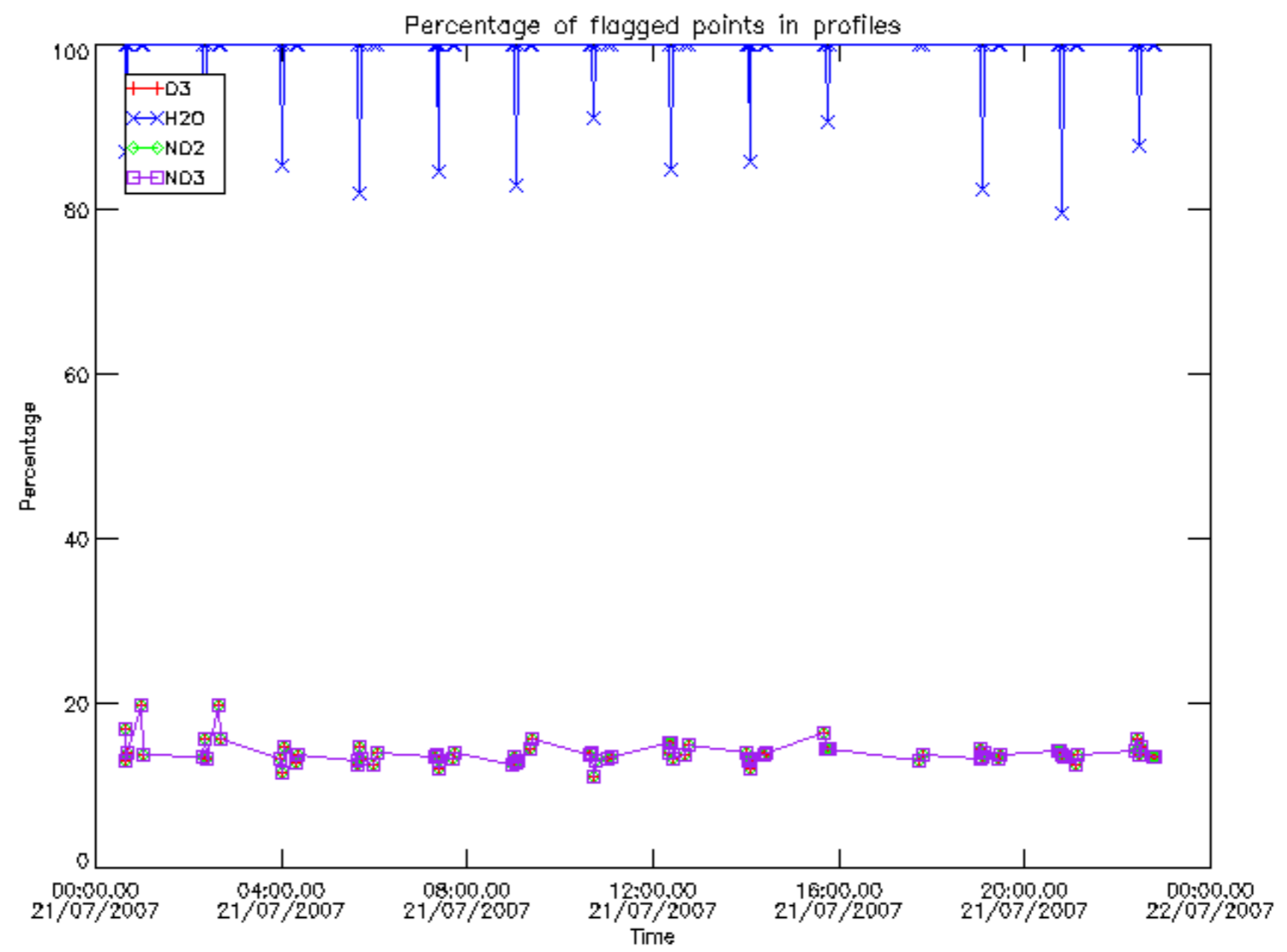




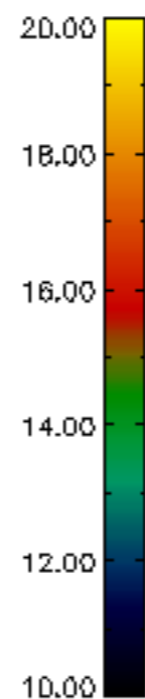
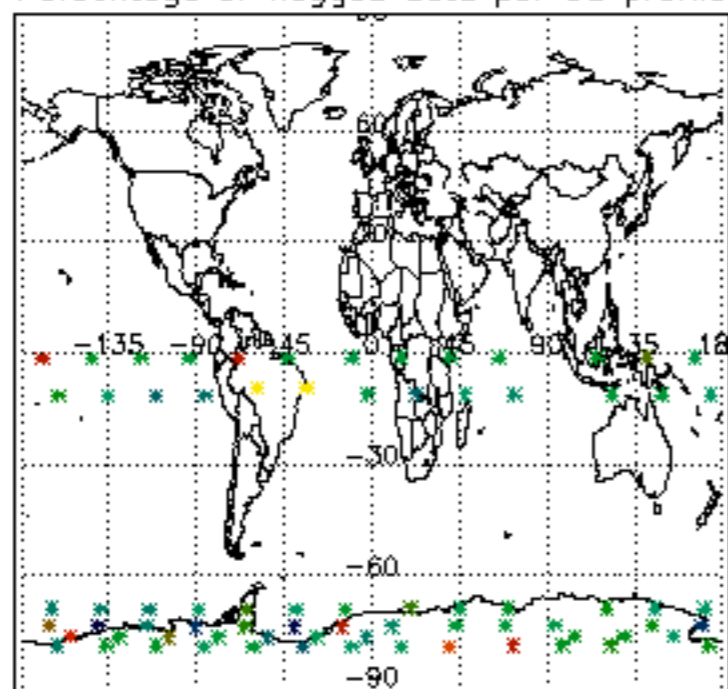




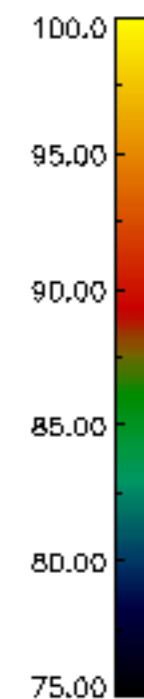
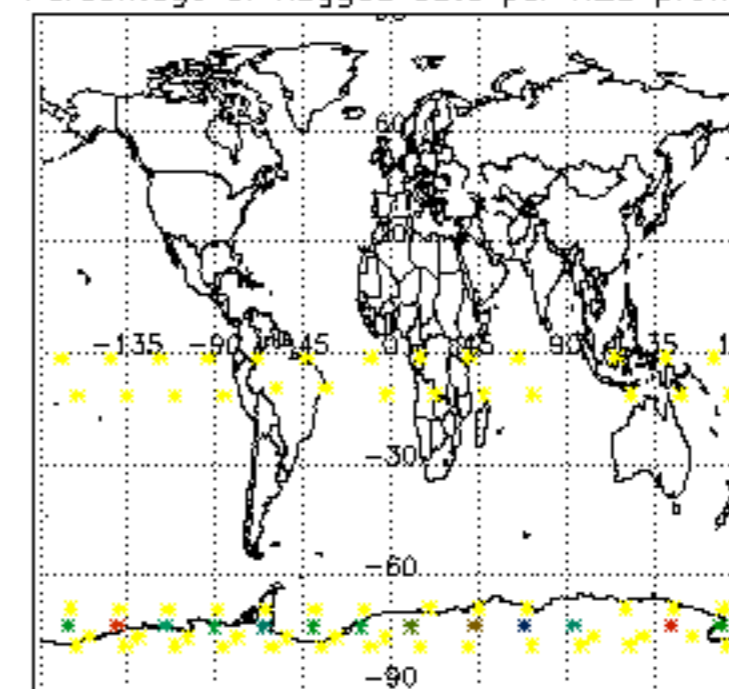




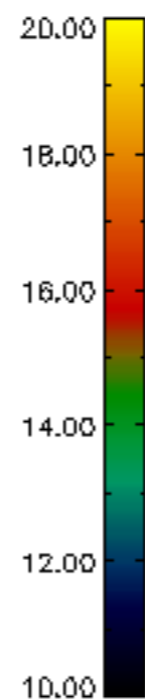
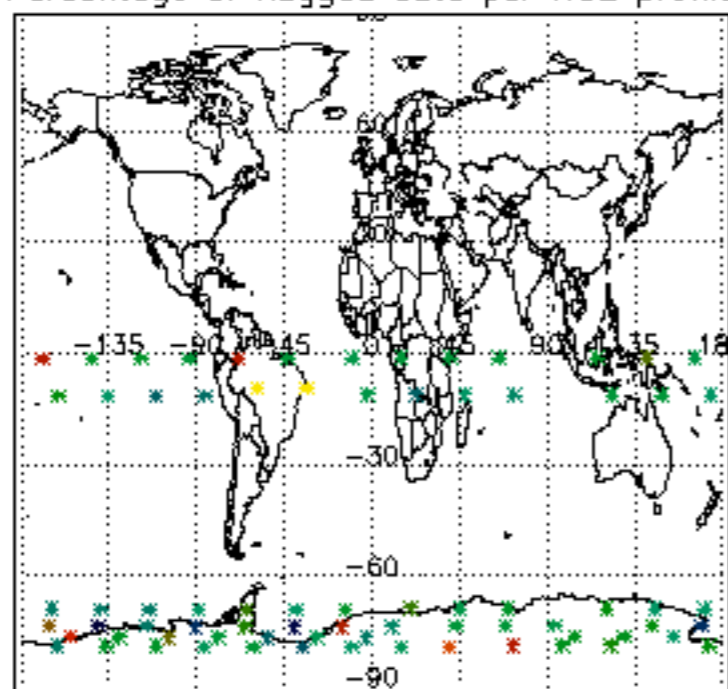
Percentage of flagged data per D3 profile



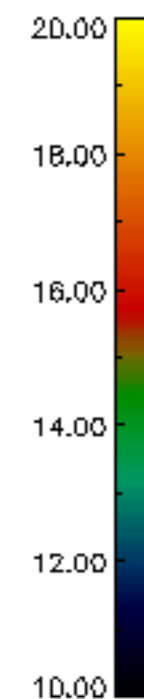
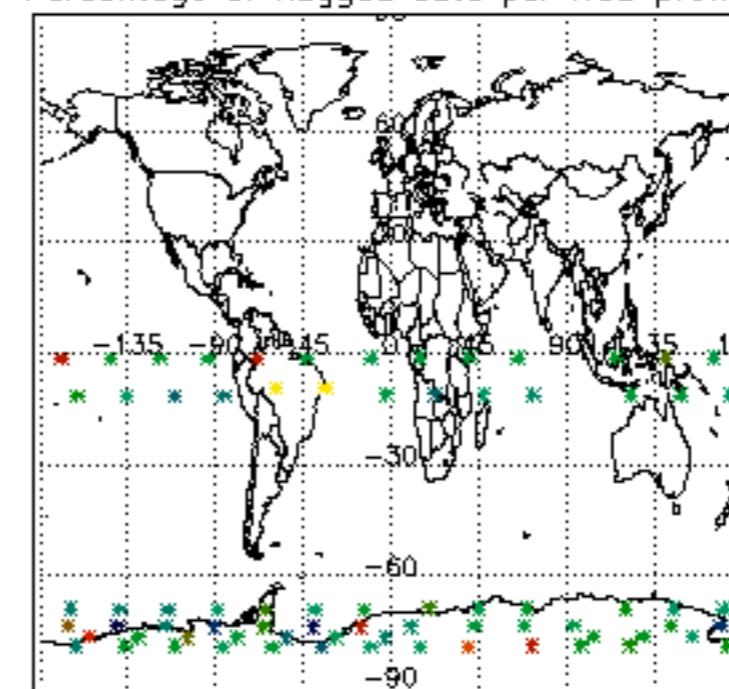
Percentage of flagged data per H2O profile

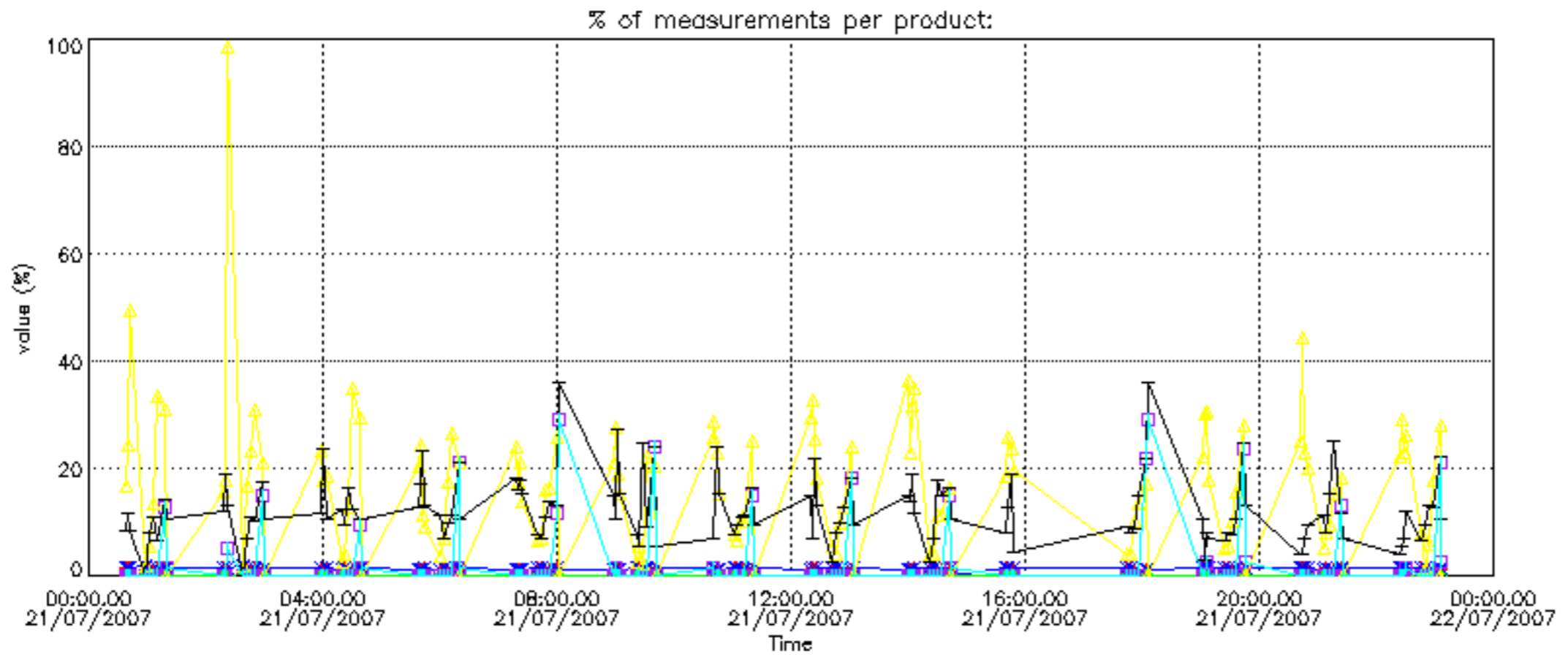


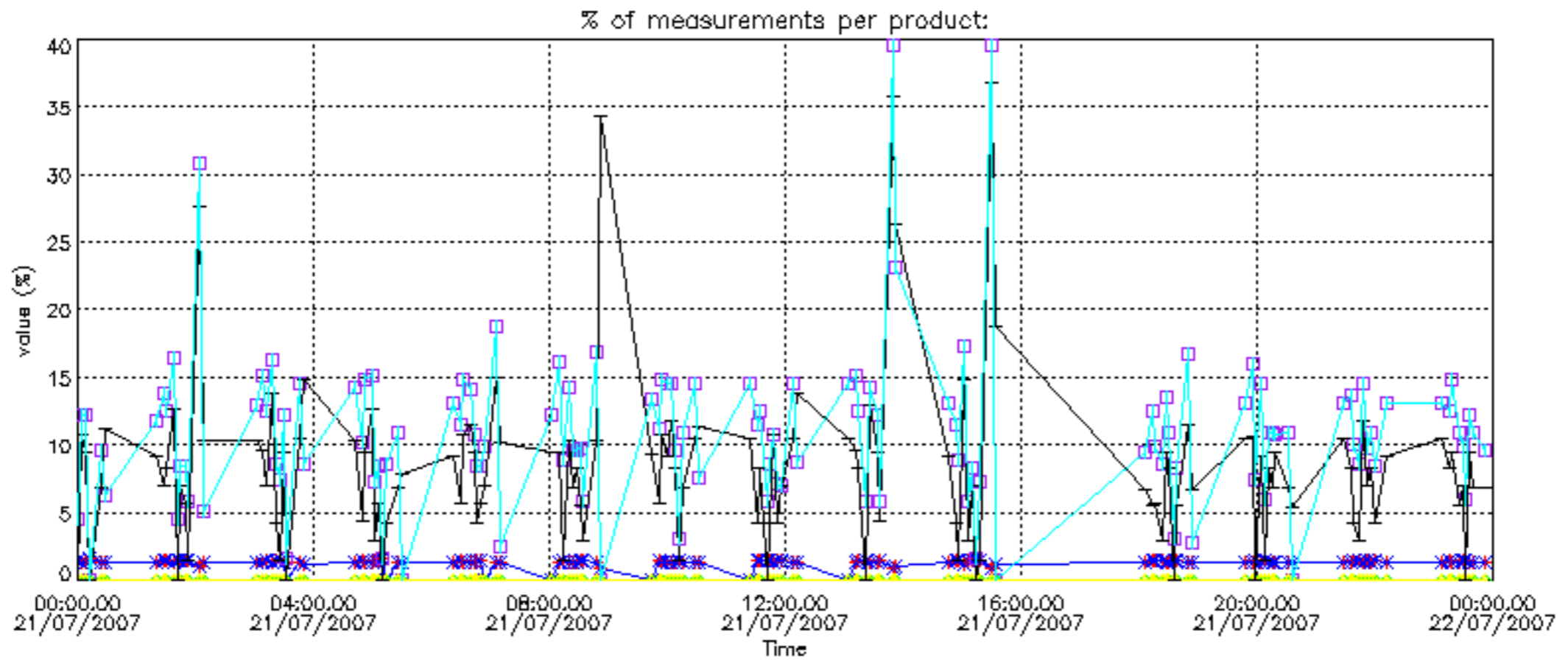
Percentage of flagged data per NO2 profile



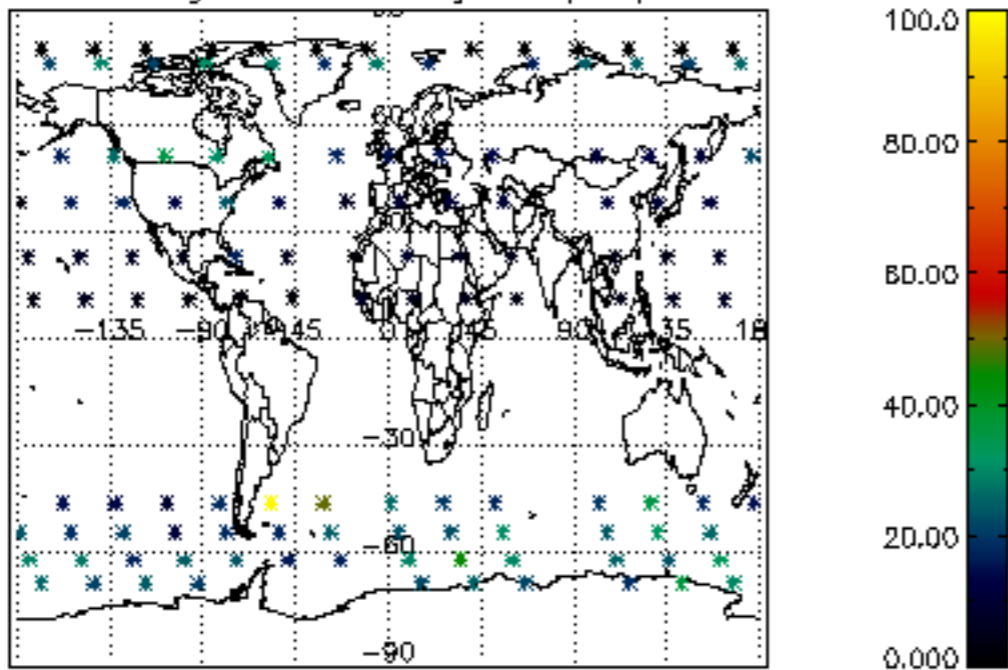
Percentage of flagged data per NO3 profile



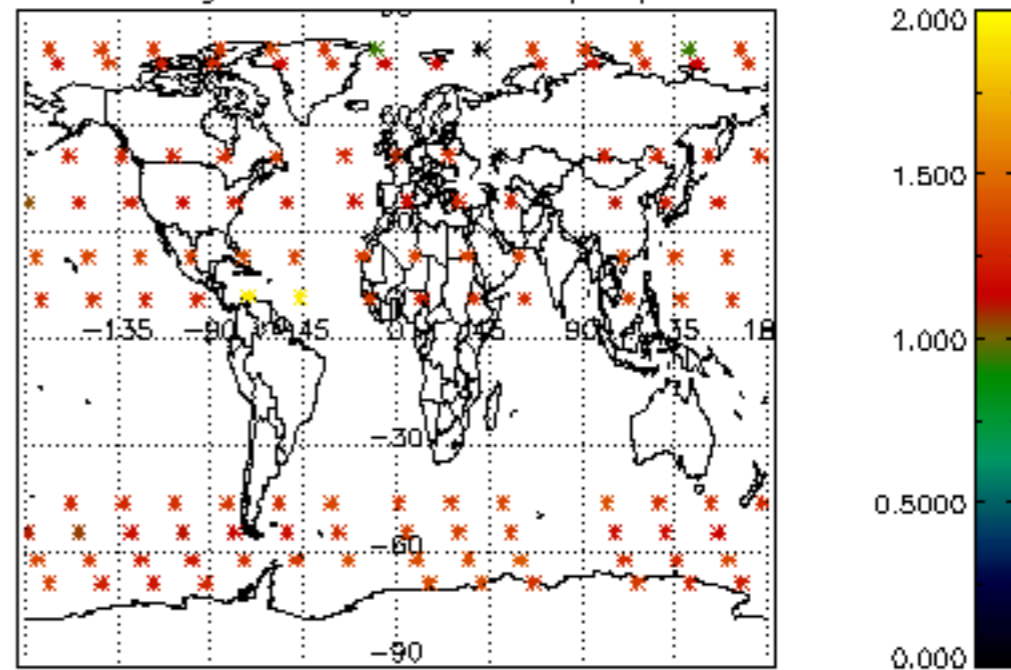




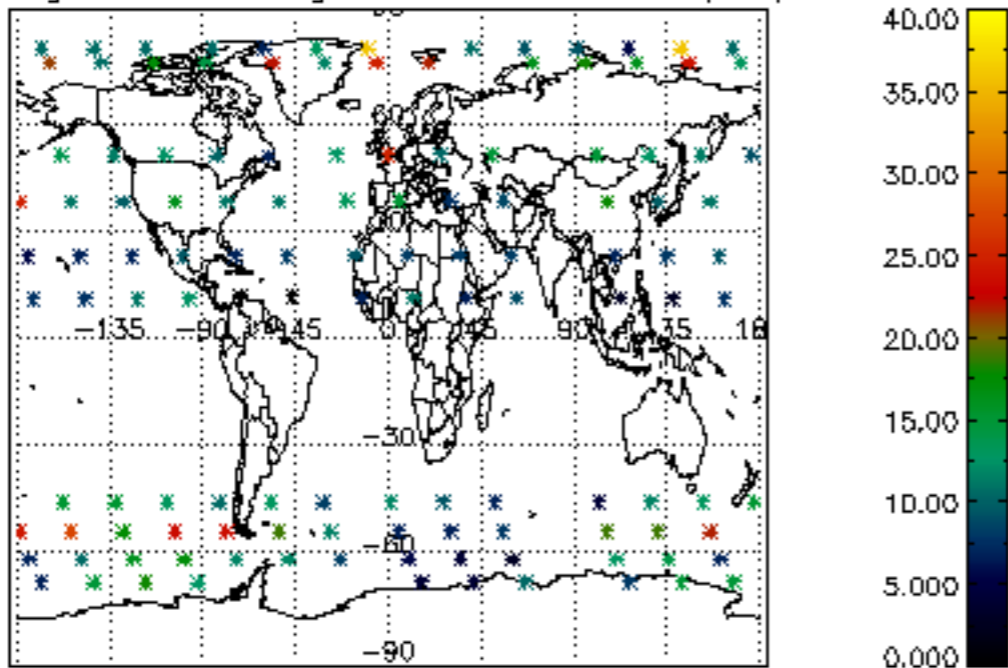
Percentage of cosmic ray hits per profile



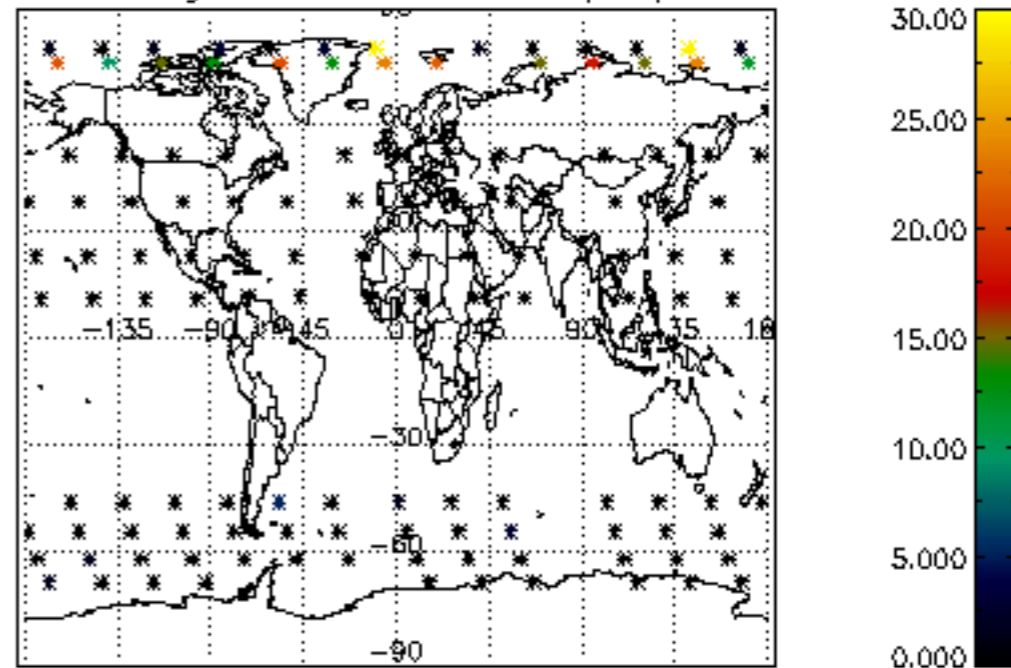
Percentage of datation errors per profile



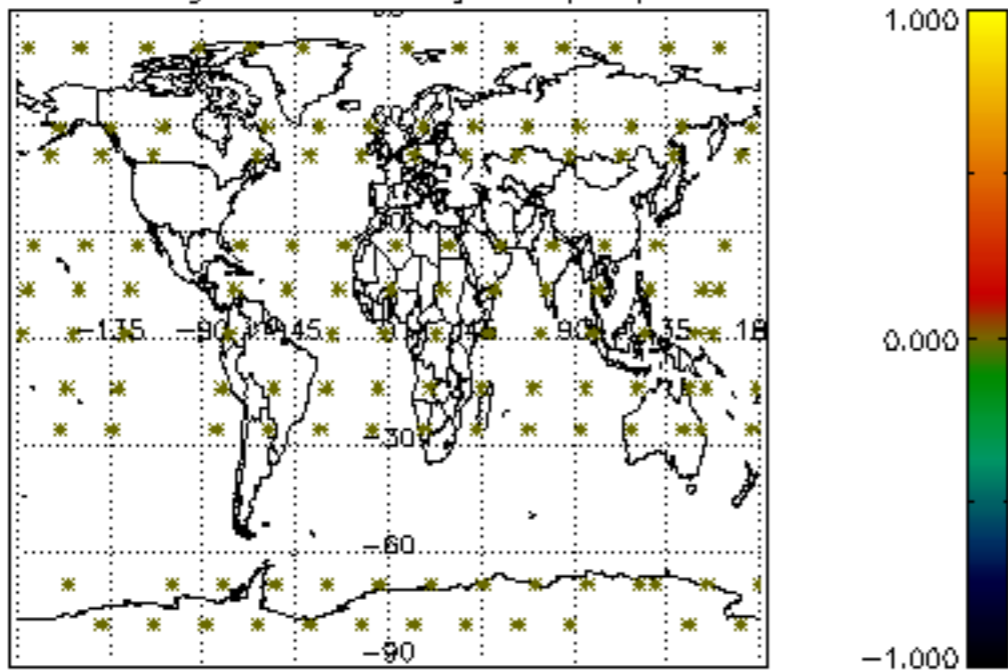
Percentage of star falling outside central band per profile



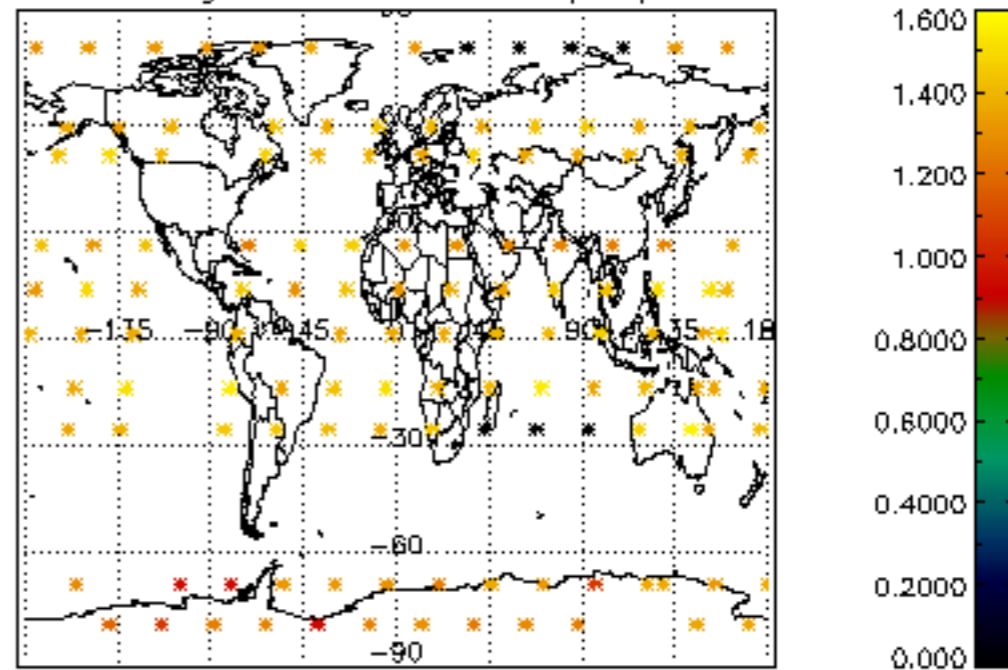
Percentage of saturation errors per profile



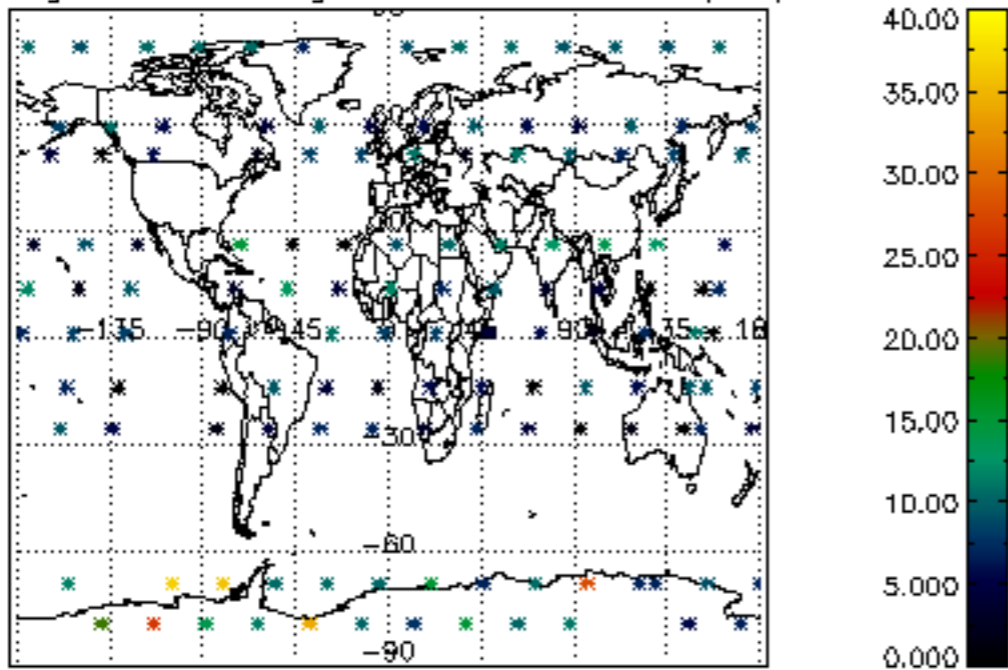
Percentage of cosmic ray hits per profile



Percentage of datation errors per profile



Percentage of star falling outside central band per profile



Percentage of saturation errors per profile

